Editorial: Research Methods in Auditing

The genesis for this special edition of the journal came while I was Director of Research for the Audit Section of the American Accounting Association. The then President, Tim Bell, asked me to undertake a project that would be of benefit to the international members of the Audit Section. One of my key research interests has always been in research methods for audit judgment and decision making (JDM) research, and I felt there was a need to help international researchers develop better research designs as they often did not have the access to the training available in the North American PhD programs which have an advantage through the combination of experienced audit JDM researchers and strong psychology schools.

In Asia, Australia and Europe there is less of a critical mass of experienced JDM researchers and as a result it is not always easy for new researchers to get the necessary advice on experimental design. I had seen through the review process, both directly and by discussion with others, some huge wastage of resources. Researchers had come up with good ideas to investigate and had collected extensive experimental data from practicing auditors. Unfortunately, some of these papers never reached the publication stage because of basic weaknesses in design, which posed severe threats to the validity of the studies. It is hard to estimate the huge wastage of resources because of these design faults. To start with there is the time commitment of the authors and the time commitment of the participants in the studies.

I have been very fortunate to co-author with a number of researchers who are clearly experts in experimental design. I was delighted when five friends and co-authors (Mike Gibbins, Ted Mock, Ira Solomon, Hun Tong Tan and Arnie Wright) agreed to participate in this project and meet the very tight timetable given to them. I was pleased that three of them co-opted three talented co-authors (Steve Asare, Mark Peecher and Jerry Turner). All of these authors are busy, over committed individuals but when offered the opportunity to assist the Audit Section of the American Accounting Association and new audit researchers throughout the world, they were keen to participate. Together they have a wealth of research experience having regularly published in the leading international research journals. They include present and former editors and associate editors of The Accounting Review, Contemporary Accounting Research and Auditing: A Journal of Practice and Theory. Overall they have extensive research design experience and I hope new researchers (including researchers changing directions) take the opportunity to learn from their experiences. But even experienced researchers can be reminded of issues that can easily be overlooked. I certainly enjoyed reading the other papers and learnt something new from every paper.

Each of the six papers considers different aspects of research design. The first paper by Ken Trotman provides an overview of many design issues in audit JDM experiments. It describes the basic purpose of experimental design, choices with respect to dependent and independent variables, and within versus between subject design choices. The paper then considers major issues in controlling for extraneous variables. While randomization is effective in ruling out most threats to internal validity, there are some threats it does not rule out and these are discussed. A range of other design choices around control groups, manipulation checks, controlled versus non-controlled experiments and use of monetary incentives are then discussed.

Mark Peecher and Ira Solomon after defining some of the key concepts, discuss the critical role of theory and the comparative advantage of
experiments. They note that it is impossible to overstate the importance of theory as there is no substitute when it comes to developing an informed basis for making key design choices. They identify and discuss four inter-related research traps that they have observed that need to be avoided. Like a number of other papers of this edition, they emphasize the importance of internal validity of an experiment. They note that for virtually all situations attempts to elevate external validity (via enhanced mundane realism or otherwise) at the expense of internal validity is a grave mistake... in the limit, in the absence of internal validity, one learns nothing about one’s theory which, in turn, means there is nothing to generalize.

While the first two papers relate generally to audit JDM research, Steve Asare and Arnie Wright discuss design choices with respect to a specific type of audit JDM research, namely, research on auditors’ performance of analytical procedures (AP). For the hypothesis generation stage of AP they consider the amount and type of background information given, the number of fluctuations to explain, ex-post evaluation of quality of a hypothesis set and choices in coding hypotheses. Different approaches to investigate information search and the related choices are then discussed. Design choices for the hypothesis evaluation and decision stages of AP follow. They note that while disaggregating the AP task into components for detailed study has yielded many insights, concurrent examination of these stages is a promising avenue for future research. Design issues related to the use of computers or internet-based administration are shown to have great potential.

Hun Tong Tan notes that the impact of knowledge on auditor performance has been a dominant theme in auditing research over the past two decades. This paper addresses the methodological issues in measuring knowledge effects. The paper initially describes the common research methods that can be used to determine knowledge effects. Ways in which knowledge can be operationalized and measured are discussed. Specific design issues related to choice of participants, choice of tasks, the effect of motivation and operationalizing performance are discussed providing some very interesting insights. Of particular interest is the informative discussions on operationalizing knowledge. Examples include: task specific experience as a proxy for knowledge, experimentally manipulated experience as a proxy for knowledge (this point is reinforced in Pecher and Solomon), rank as a proxy for knowledge and test questions, responses to simulated scenarios and memory as measures of knowledge.

Mike Gibbins’ paper has two distinct themes. The first relates to a variety of research methods including laboratory experiments discussed in the first four articles. The paper persuasively argues that context is significant in shaping auditors’ expertise and that research needs to be context-sensitive. Second, the paper considers field research using experimental questionnaires as a useful way to examine contextual variables. The paper makes the point that contextual factors such as incentives, time pressure, professional standards, decision aids and interpersonal relationships make the audit setting (and other areas of public accounting) to be distinctive and interesting. The second part of the paper is used to complement earlier papers in this edition by moving the discussion from experiments to the use of case based field questionnaires. This type of research refers to the systematic collection of field-generated data using extensive questionnaires or semi-structured interviews completed by auditors and other professionals, reporting on their experiences. Again the critical role of theory in making design choices is emphasized.

The final paper by Ted Mock and Jerry Turner widens the scope of research methods addressed in this issue by looking at auditor judgements through the study or actual audit workpapers. It thus discusses archival rather than experimental research. Data from actual audit engagements is sought either directly from the working papers or more commonly via a data gathering instrument being developed for auditors to abstract the desired information. The paper outlines the general steps to conduct an archival audit study and then considers the following general design issues: sample selection, failure to understand or to attend to the research task, response rates, measurement issues, lack of consistency across firms and external validity. The paper then considers some specific issues related to problems in obtaining CPA firm participation. These include confidentiality, legal issues, economic issues and organizational issues. The final section considers three archival studies to
illustrate some of the design difficulties encountered and how the researchers adopted methodologies to obtain useful data.

Designing research studies is challenging but certainly enjoyable (particularly if working with co-authors). The conduct of the research does lead to some of the real highs of an academic job: attending and presenting at international conferences and in particular receiving the letter informing you that your research has been considered of sufficient quality to be published in international research journals. Don’t let a few rejections on the way stop you from achieving those highs. Hopefully some insights from this special edition will get you there a little quicker with a few less disappointments along the way.

Ken T. Trotman, Guest Editor

Errata, re: Volume 5, Number 2, pp 127-139:

We advise readers to note these corrections to the subject paper:

Stanley Y. Chang and Ronald A. Davidson, The Importance of Auditing Topics to Chinese Auditors:

p. 129, paragraph 3, sentence 1 should read:

In the public sector, the State Council of the People’s Republic of China established the China National Audit Office (CNAO) to provide ‘audit supervision’ over all levels of governmental units and state-run enterprises.’

p. 137, last paragraph, should have read:

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