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Reliance on Decision Aids: An Examination of Auditors' Assessment of Management Fraud

Martha M. Eining, Donald R. Jones and James K. Loebbecke

SUMMARY

The assessment of management fraud risk is a complex decision process, but one with which few auditors have had experience. As a result, decision aids have been suggested to support this process. Unfortunately, many times users do not rely on decision aids even when doing so would improve the quality of the decision. This paper reports on an experiment that examines the use of an expert system decision aid created to enhance the engagement of the user and increase reliance on the aid. Auditors using the expert system exhibited the ability to better discriminate between situations with varying levels of management fraud risk and selected more consistent subsequent decisions regarding appropriate audit actions than did users of a decision aid that provided only a suggested assessment, a logit statistical model. The logit model users did discriminate better than both checklist users and unaided decision makers.

Key Words: Management fraud, Decision aid, Expert system, Decision aid reliance, Red flags.

Data Availability: Contact the authors.

The Mitigation of Hindsight Bias in Judges' Evaluation of Auditor Decisions

John C. Anderson, Marianne M. Jennings, D. Jordan Lowe and Philip M. J. Reckers

SUMMARY

The public accounting profession may be significantly disadvantaged if hindsight bias is manifest through the U.S. civil liability system. Auditors must make decisions without knowledge of an eventual outcome, but auditor liability is determined from a perspective that includes outcome knowledge. Ex post, litigants tend to blame auditors for failing to foresee and anticipate subsequent financial problems of their audit clients.

This study was conducted to test the effectiveness of two methods of mitigating hindsight bias in a legal liability context. An experiment was conducted with 157 state general jurisdiction judges serving as subjects. Results indicate that these judges' evaluations of auditors' performance were subject to hindsight bias. More importantly, we found that under one of the mitigation methods, evaluative judgments were significantly more favorable than were judgments in the unmitigated negative outcome treatment, and essentially the same as evaluative judgments in the no outcome control condition. The primary contribution of this study is that it is the first to provide evidence that judges' hindsight bias can be mitigated in an audit legal liability context. Implications for audit legal liability and future research are also discussed.

Key Words: Hindsight bias, Legal liability, Debiasing.

Data Availability: The data upon which this paper is based may be obtained from the authors on request.

Stabilising the Sieve Sample Size Using PPS

J. M. Horgan

SUMMARY

Sieve sampling is a list sequential, monetary-unit selection method which exploits the natural line item structure of the population and can easily be implemented either by hand or on a computer. It selects distinct line items and has been shown to estimate the total misstatement amount in substantive testing with good results. It does however have one major disadvantage: the sample size is not constant. Variable sample size designs are usually avoided by auditors because they dislike being in a situation where the number of observations is unpredictable at the planning stage; a sample size less than the target may lessen the belief in the audit, and a greater sample size may increase the cost.

In this paper a new procedure, stabilised sieve sampling, which maintains the flexibility and simplicity of sieve sampling while overcoming the variable sample size problem, is proposed. Comparisons with unrestricted random, sieve and Lahiri sampling, carried out using the Stringer, cell and moment bounds by means of a simulation study based on two actual accounting populations with a range of error rates and amounts, yield favourable results. Stabilised sieve sampling has a higher coverage than the other methods. Its efficiency is similar to that of sieve sampling and it is consistently more efficient than unrestricted random and Lahiri sampling; the greatest gains in efficiency occur in large line item populations when the sample size is not small.

Key Words: Bound estimates, Monetary-unit sampling, Probability-proportional-to-size, Substantive testing.

The Use of Benford's Law as an Aid in Analytical Procedures

Mark J. Nigrini and Linda J. Mittermaier

SUMMARY

This study introduces and describes digital and number tests that could be used by auditors as analytical procedures in the planning stages of the audit. The mathematical basis of the tests is Benford's Law, a property of tabulated numbers that provides the expected frequencies of the digits in tabulated data. Several empirical studies suggest that the digit patterns of

authentic numbers should conform to the expected frequencies of Benford's Law. Thus, auditors could test the authenticity of lists of numbers by comparing the actual and expected digital frequencies. The results could assist auditors in determining the nature and extent of other audit procedures. Several tests are presented that examine data for conformity of the digital frequencies to Benford's Law, and a successful illustration at an oil company is described. Other case studies from practice illustrating the detection of suspect items are briefly presented.

Key Words: **AA** Analytical procedures, Benford's Law.

Data Availability: **The data used in the study are confidential current corporate data, and therefore are not available to readers. Contact the first author for software that can be used to duplicate the tests on other data sets.**



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