

Meta-Analysis of Variables Descriptive Statistics in Accounting Journals¹

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Research Paper

Introduction

Descriptive statistics is a description of the characteristics and amount of numbers used in statistical analysis. The main purpose of this descriptive statistic is mainly to provide a brief description of the sample used in the research. Also, reviewers and editors of journals and readers of articles use descriptive statistics to evaluate the overall accuracy of the data used by researchers in statistical analysis. Corporate financial statement data is available in databases such as Data Stream in many countries around the world. Despite the existence of several information processing companies in Iran, a comprehensive and credible database for research has not been introduced. Researchers mainly use Rahavard Novin software or collect data manually in Iran. The lack of a valid database has led to uncertainty about the accuracy and quality of article data. This shortcoming has made it difficult to verify the data, especially when Iranian researchers want to publish an article in international journals.

Evaluating the accuracy of the data, plays an important role in research. One of the reasons for the rejection of papers in international accounting journals, is the lack of reliance on domestic data by editors due to the lack of access to financial statement data in international databases. Also, one of the ways that editors and reviewers can find out the accuracy of data, is to refer to the

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descriptive statistics of previously published variables in accounting journals. One way to verify the descriptive statistics of articles is to obtain a range of the average of the variables used in the articles by referring to previously published articles in domestic journals. In this study, descriptive statistics of frequent variables in accounting journals were used to provide an overview of the status of variables in Iranian accounting journals and as a scale of variable limits in papers used by accounting researchers, peer reviewers, and editors.

Methodology

In this research, descriptive statistics meta-analysis of accounting articles has been studied. The statistical population of this research is accounting scientific research journals approved by the Ministry of Science, Research and Technology in Iran. The period of this research is the articles published in accounting journals from the years 2016 to 2018.

Articles were selected regardless of the research topic. In other words, the criterion for selecting articles was only based on the variables studied in the study. In this research, the variables selected for analysis that have the same operational definition in the articles and provide the possibility of inferring the variables and the reliability of the results. Considering the desired conditions, 16 journals and 632 articles were analyzed. Finally, the operational definition of the variables was collected and then the variables whose operational definition was the same, were used for analysis.

Results and Discussion

Journal of Financial Accounting Knowledge, Empirical Accounting Research; Accounting and Auditing Studies had the most variables studied in this study. Journal of Management Accounting, Journal of Value and Behavioral Accounting; and Government Accounting had the least variables studied in this study. The results showed that the standard deviation and dispersion of some variables are high and some are low. Variables such as cash holdings, equity returns; and the ratio of intangible assets have the lowest dispersion, and variables such as earnings per share, book value per share, and the asset's logarithm, have the highest dispersion among the variables. The findings indicate that there are differences and dispersions between the descriptive statistics of the variables, which may be due to differences in the time of review of articles and other differences in the sample and the statistical population of the research.

Conclusion

Some of the variables in this study were less frequent and some of the variables were more frequent, therefore, the number of samples may be a factor influencing the results of this study. Especially in some articles, the variables are expressed in different ratios and the outlier data are deleted in

different procedures. There may even be differences in the average descriptive statistics of articles across companies as well as industries. Despite these limitations, given that this article examines the minimum, maximum, mean, standard deviation, and period of article variables, researchers can gain insight into the status of descriptive statistics in articles. Given the limitations of this research, the reviewers and editors of accounting journals are suggested to use other data validation procedures. In other words, the findings of this study can be used in conjunction with other data validation tools and do not preclude the use of other data validation methods.

Keyword: Descriptive Statistics, Meta-Analysis, Financial Ratios.

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