

ISSN 2090-3359 (Print)
ISSN 2090-3367 (Online)



Advances in Decision Sciences

Volume 22(A)
22nd Anniversary Special Issue
December 2018

Michael McAleer
Editor-in-Chief
University Chair Professor
Asia University, Taiwan



Published by Asia University, Taiwan

ADS@ASIAUNIVERSITY

**22nd Anniversary Special Issue of
Advances in Decision Sciences (ADS), 1997-2018**

Michael McAleer *

Department of Finance
Asia University
Taiwan
and
Discipline of Business Analytics
University of Sydney Business School
Australia
and
Econometric Institute
Erasmus School of Economics
Erasmus University Rotterdam
The Netherlands
and
Department of Economic Analysis and ICAE
Complutense University of Madrid
Spain
and
Institute of Advanced Sciences
Yokohama National University
Japan

Updated: December 2018

* The author is most grateful to Chia-Lin Chang for helpful discussions, and wishes to thank the Australian Research Council and the Ministry of Science and Technology (MOST), Taiwan, for financial support.

Email: michael.mcaleer@gmail.com

Abstract

Decision Sciences is a multidisciplinary area that is concerned with advancing knowledge and improving instruction in all areas related to decision making and scientific analysis in several cognate disciplines in both the Sciences and Social Sciences. This paper is concerned with an editorial statement of intent for *Advances in Decision Sciences (ADS)*, which was founded in 1997, so that 2018 marks the 22nd Anniversary of the journal. The purpose of this paper is to analyze the development of 382 papers that have been published in *ADS* from 1997 to 2018 through the number of papers, number of pages, and mean length of papers.

Keywords: Decision making, decision sciences, descriptive statistics, number of papers, number of pages, mean length of papers.

JEL: C44, D81, D91, G11, G41, M51.

1. Introduction

Decision Sciences is a multidisciplinary area that is concerned with advancing knowledge and improving instruction in all areas related to decision making and scientific analysis in several cognate disciplines in both the Sciences and Social Sciences. These related disciplines include several sub-discipline areas in Social Science and Business, Science and Engineering, Climate Change and Energy, Impact Measurement Metrics, and Health and Medical Science. The disciplines and sub-disciplines in these five broad areas in Decisions Sciences are given below.

Social Science and Business includes Economics, Finance, Marketing, Risk Management, Management Science, International Business, Econometrics, Financial Econometrics, Time Series Analysis, Cross-sectional data, Panel data, Marketing, Risk Management, Portfolio Management, Accounting, Political Science, Demography, Agriculture, Aquaculture, and Tourism Research; **Science and Engineering** includes Physics, Chemistry, Bio-Chemistry, Statistics, Applied Mathematics, Quantitative Methods, Computational Science, Nanotechnology, Financial Mathematics, Financial Statistics, Operations Research, Engineering, Financial Engineering, and Bio-engineering; **Climate Change and Energy** includes Climate Science, Global Warming, Environmental Science, Climate Economics, Climate Finance, Climate Econometrics, Greenhouse Gases, Fossil Fuels, Carbon Emissions, Carbon Capture, Carbon Storage, Green Energy, Renewable Energy, Sustainable Energy, Energy Economics, and Energy Finance; **Impact Measurement Metrics** includes Impact Factors, Performance Measures, Alternative h-indexes, Informetrics, Informatics, Technometrics, Bibliometrics, Scientometrics, Psychometrics, Chemometrics, Nanometrics,

Biometrics, Health Metrics, Business Metrics, Alternative Metrics (or Altmetrics), Big Data Management, Data Mining, Clarivate Analytics, Google Scholar, Scopus, Social Science Research Network (SSRN), Microsoft Academic, and Research Papers in Economics (RePEc) performance indicators that are based on publications, citations and downloads of journal articles, working papers, discussion papers, and research reports in Economics, Business and cognate disciplines; **Health and Medical Science** includes Medicine, Medical Research, Bio-medicine, Bio-medical Research, Health Science, and Health Measurement.

It is in this multi-disciplinary context that *Advances in Decision Sciences (ADS)* was established in 1997. *ADS* has always sought to publish innovative and original peer-reviewed research articles, as well as critical review articles, in all areas of decision sciences.

The scope of *ADS* is intentionally broad, but relies fundamentally on measurement, methods and methodologies, techniques and skills from a broad range of cognate disciplines that emphasize quantitative methods to achieve optimal decision making outcomes.

As the 22nd Anniversary of the inception of *ADS* occurred in 2018, *ADS* is publishing a 22nd Anniversary special issue, denoted 22(A), as a single volume in 2018 (for further details, see Chang, McAleer and Wong (2018a, 2018b)).

ADS has published a total of 385 papers from 1997 through to 2018 (see <http://journal.asia.edu.tw/ADS/category/table-of-contents-for-year-2018/>). The current

paper is included in the data for 2018.

The purpose of this paper is to analyze the development of the 385 papers that have been published in *ADS* from 1997 to 2018 through the number of papers, number of pages, and mean length of papers. Section 1 discusses the multidisciplinary nature of decision sciences, while Section 2 discusses the descriptive statistics, and Section 3 provides a discussion of the future prospects of *ADS*.

2. Descriptive Statistics

For the period 1997-2018, **Table 1** provides the descriptive statistics for *ADS* in terms of the number of papers, number of pages, and mean length of papers, while Figures 1 and 2 provide a graphical representation of the statistics.

The number of papers has ranged from a low of 3 to a high of 42, with spikes in 2006 and 2012, at 40 and 42 papers, respectively. Omitting these two outliers, as well as 3 papers in 2017 when the previous publisher had decided to discontinue the journal, the range is from 7 (in 2015 and 2016) to 26 (in 2011). Excluding the two outliers in 2006 and 2012, it is clear that the number of published papers was reasonably steady from 1997 through to 2014. The number of papers in 2018 is the largest since 2012, and slightly higher than the annual mean number of papers of 17.5. These points can also be seen in **Figure 2**.

Not surprisingly, the mean number of **pages** has a broadly similar pattern to the mean number of **papers**. The mean number of pages is 257.36, and the range is from 25 in

2017 to 697 in 2012. The large outliers are in 2006 and 2012, while the small outliers are in 2015, 2016 and 2017. Excluding these outliers shows that the range is much smaller, from 125 in 2013 to 444 in 2018. Moreover, the number of pages has been reasonably steady throughout the existence of *ADS* from 1997 to 2018. These points can also be seen clearly in **Figure 1**.

The mean length of papers is the descriptive measure that has had the least variability throughout the life of the journal, with the exception of 2016, 2017 and 2018. The mean length of papers is 14.09, and the range is from 7.00 in 2016 to 23.61 in 2018. Excluding the large outlier in 2018 and the two small outliers in 2016 and 2017 shows that the range is much smaller, from 10.42 in 2013 to 16.92 in 1998. These points can also be seen in **Figure 2**.

Overall, more pages have been published in 2018 than in any year since 2012, and only 2006 and 2012 have produced more pages in the journal. Furthermore, more papers have been published in 2018 than in each of the previous three years, as well as in four of the past five years. More pages have appeared in 2018 than in the previous three years combined.

3. Discussion of Future Research for ADS

The significance of the number of pages per paper in 2018 as an outlier is that the ownership of *ADS* was transferred from the previous publisher to Asia University in early 2018 when the previous publisher decided to discontinue the journal. Subsequently, a new and talented editorial team has been established (for further details,

see <http://journal.asia.edu.tw/ADS/editorial-board/>), which augurs well for the future of *ADS*.

As mentioned above, the discipline of decision sciences covers a broad spectrum of disciplines in the sciences and social sciences that are concerned with any aspects of optimal decision making. *ADS* is deeply concerned about publishing the best papers from any of these areas. As discussed above, the range well-known cognate disciplines include:

- (i) **Social Science and Business**, which includes Economics, Finance, Econometrics, Financial Econometrics, Time Series, Cross-sectional data, Panel data, Marketing, Risk Management, Portfolio Management, Management Science, International Business, Accounting, Political Science, Demography, Agriculture, Aquaculture, and Tourism Research;
- (ii) **Science and Engineering**, which includes Physics, Chemistry, Bio-Chemistry, Statistics, Applied Mathematics, Quantitative Methods, Computational Science, Nanotechnology, Financial Mathematics, Financial Statistics, Operations Research, Engineering, Financial Engineering, and Bio-engineering;
- (iii) **Climate Change and Energy**, which includes Climate Science, Global Warming, Environmental Science, Climate Economics, Climate Finance, Climate Econometrics, Fossil Fuels, Carbon Emissions, Carbon Capture, Carbon Storage, Green Energy, Renewable Energy, Sustainable Energy, Energy

Economics, and Energy Finance;

(iv) **Impact Measurement Metrics**, which includes Impact factors, Performance Measures, Alternative h-indexes, Informetrics, Informatics, Technometrics, Bibliometrics, Scientometrics, Psychometrics, Chemometrics, Nanometrics, Biometrics, Health Metrics, Business Metrics, Alternative Metrics (or Altmetrics), Big Data Management, Data Mining, Clarivate Analytics, Google Scholar, Scopus, Social Science Research Network (SSRN), Microsoft Academic, and Research Papers in Economics (RePEc);

(v) **Health and Medical Science**, which includes Medicine, Medical Research, Bio-medicine, Bio-medical Research, Health Science, and Health Measurement.

The 22nd Anniversary special issue includes topical papers on an “Editorial Statement of Intent for Advances in Decision Sciences (ADS): 22nd Anniversary Special Issue in 2018”, “Research Ideas for Advances in Decision Sciences (ADS): 22nd Anniversary Special Issue in 2018”, “Decision Sciences, Economics, Finance, Business, Computing, and Big Data: Connections”, “Is Wine a Safe-Haven? Evidence from a Nonparametric Causality-in-Quantiles Test”, “A New Perspective on the Diffusion of Global Democracy”, “Earnings, Mergers and Acquisitions Under Pension Disclosure Standards”, “Fake News and Indifference to Truth: Dissecting Tweets and State of the Union Addresses by Presidents Obama and Trump”, “High Frequency Impact of Monetary Policy and Macroeconomic Surprises on US MSAs, Aggregate US Housing Returns and Asymmetric Volatility”, “Assessing the Importance of Market Risk and its Sources in SMEs of the Visegrad Group and Serbia”, “Artificial Intelligence and Economic Growth”, “A Three-arm Non-inferiority Test for Heteroscedastic Data”,

“Prediction Intervals for Expert-Adjusted Forecasts”, “Executive Tenure and Firm Performance: An Empirical Examination of the Indian Corporate Landscape”, “Diversity in Economic Decision-making and Behaviour: A New Brief Review”, “Bayesian Shrinkage Estimation of Time-varying Covariance Matrices in Financial Time Series”, “The Noise Trader Effect in a Walrasian Financial Market”, and “Joint Distribution of Forecasts and Outcomes: Impact of Non-Normality on the Measurement of Forecasting Skill, with Applications to Analysts’ Target Prices”.

ADS will continue to encourage researchers, academics, scientists, social scientists, advanced students, practitioners, and other interested individuals to undertake research in all areas of decision sciences, and consider the journal as an outlet for their research.

This will also afford any interested contributors the opportunity to be well informed of the latest innovations in the analysis of optimal decision making through developments in all technical and cognate disciplines in the decision sciences.

References

C.-L. Chang, M. McAleer, and W.-K. Wong (2018a), “Editorial Statement of Intent for Advances in Decision Sciences (ADS): 22nd Anniversary Special Issue in 2018”, *Advances in Decision Sciences (ADS)*, 22(A), 1-10.

http://journal.asia.edu.tw/ADS/wp-content/uploads/papers/2018/Editorial-Statement-of-Intent-for-ADS_12-September-2018.pdf

C.-L. Chang, M. McAleer, and W.-K. Wong (2018b), “Research Ideas for Advances in Decision Sciences (ADS): 22nd Anniversary Special Issue in 2018”, *Advances in Decision Sciences (ADS)*, 22(A), 1-12.

http://journal.asia.edu.tw/ADS/wp-content/uploads/papers/2018/Research-Ideas-for-ADS_12-September-2018.pdf

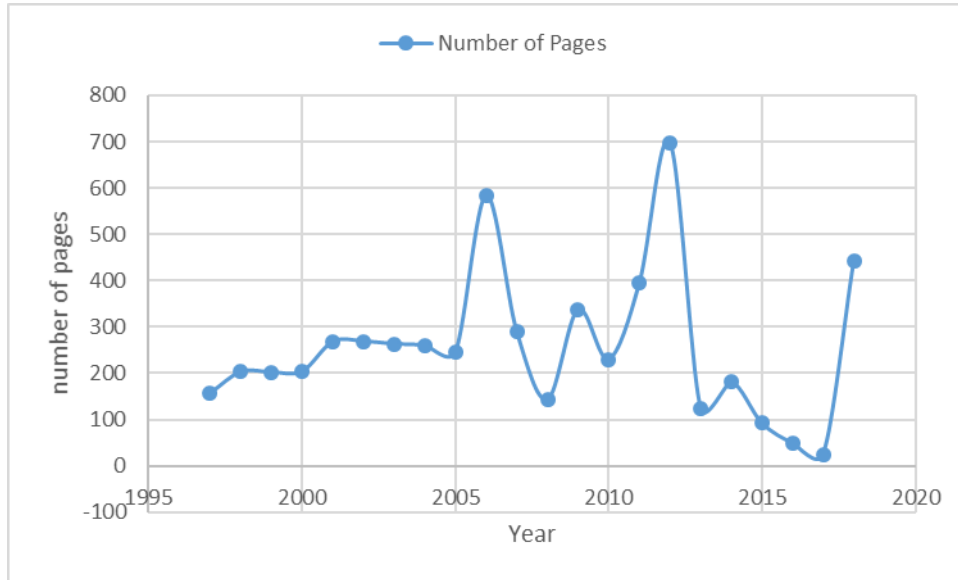
Table 1
Descriptive Statistics for ADS, 1997-2018

Year	Number of Papers	Number of Pages	Mean Length of Papers
1997	13	157	12.08
1998	12	203	16.92
1999	12	202	16.83
2000	15	204	13.60
2001	19	268	14.11
2002	18	269	14.94
2003	20	263	13.15
2004	16	260	16.25
2005	21	246	11.71
2006	40	583	14.58
2007	22	290	13.18
2008	10	143	14.30
2009	21	337	16.05
2010	14	230	16.43
2011	26	394	15.15
2012	42	697	16.60
2013	12	125	10.42
2014	17	181	10.65
2015	7	92	13.14
2016	7	49	7.00
2017	3	25	8.33
2018	18	443	24.61
Mean	17.5	257.32	14.09

Note: The present paper is included in the data for 2018.

Figure 1

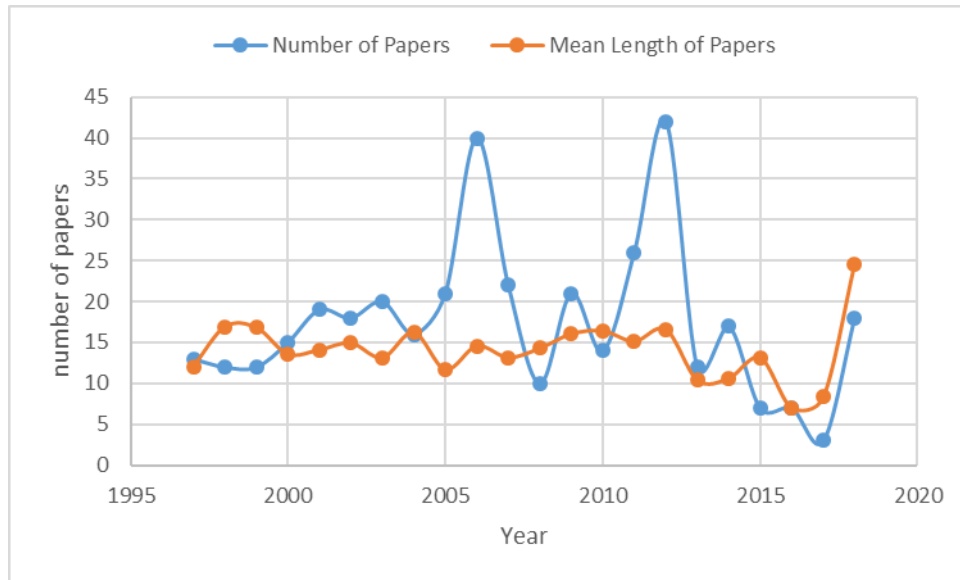
Number of Pages for ADS, 1997-2018



Note: The present paper is included in the data for 2018.

Figure 2

Number and Mean Length of Papers for ADS, 1997-2018



Note: The present paper is included in the data for 2018.