## Propensity Score Matching in Accounting Research

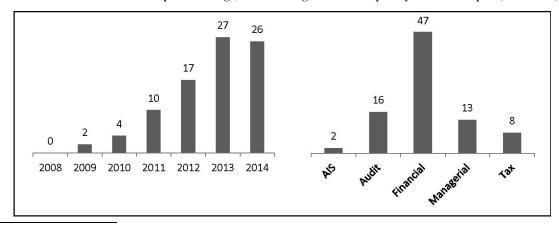
Shipman, Jonathan E. and Swanquist, Quinn T. and Whited, Robert L. *The Accounting Review* (2017), 92 (1), pp. 213–244

### 3 PROPENSITY SCORE MATCHING IN ACCOUNTING RESEARCH

- ■文献のソース (Table 1)
  - 2008 ~ 2014 年における、The Accounting Review, Contemporary Accounting Research, Journal of Accounting and Economics, Journal of Accounting Research, and Review of Accounting Studies に掲載された論文が対象

# TABLE 1 Descriptive Statistics for Accounting Studies Using PSM

Panel A: Number of Studies in Top Accounting Journals Using PSM Techniques by Year and Topic<sup>a</sup> (2008–2014)



<sup>&</sup>lt;sup>a</sup> Topics are classified using the BYU Accounting Research taxonomy (Coyne et al. 2010). Twenty-three studies had more than one BYU topic classification (the majority of which include "financial"). Based on judgement, we placed each study into just one classification.

#### Panel B: Purpose and Reliance on PSM in Empirical Tests (2008–2014)

Is PSM used as a primary or sensitivity analysis?	Primary 37	Sensitivity 49
If used as a primary analysis, is PSM the only method for at least one conclusion?	Yes 22	No 15
Is PSM motivated by concerns about FFM or nonlinearities?	Yes 20	No 66
Did the paper test for FFM or nonlinearities?	Yes 2	No 84
Is PSM motivated by generic concerns about "self-selection," "endogeneity," or "omitted variable" bias?	Yes 33	No 53

### Panel C: Implementation of PSM (2008–2014)

Tanel C. Implementation of 15M (2000–2014)			
Was the underlying treatment construct dichotomous?	Yes 52	No 34	
For the 64 studies that used other non-PSM tests, were the matchin consistent with other tests?	ng/control variables Yes 13	No 43	Unknown 8
Does the study match with replacement or without replacement?	With 5	Without 26	Unknown 55
Did the paper impose a caliper distance?	Yes 29	No/Unknown 57	
Was the matching procedure 1:1 or 1:m?	1:1 68	1:m 11	Unknown 7
Did the paper discuss covariate balance?	Yes 51	No 35	
Does the study use MR or a t-test for the second stage?	MR 58	t-test 22	Unknown 6

Table 1 presents descriptive statistics on the use of PSM in the leading accounting journals from 2008–2014. Studies were identified by searching all publications in *The Accounting Review* (28 studies), *Contemporary Accounting Research* (20 studies), *Journal of Accounting and Economics* (13 studies), *Journal of Accounting Research* (16 studies), and *Review of Accounting Studies* (nine studies) for PSM-related key words (e.g., "propensity," "PSM") and manually determining whether a PSM technique was used. Panel A categorizes the studies by year and topic. Panels B and C classify the studies by motivation and methodology. All studies identified are listed in Appendix A.