



How Rules-Oriented Are Accounting Standards?

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&

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Devin in his natural environment



Devin groomed for public viewing



Context

Definitions

Standards

- Formalized, codified decision rules (Baer 1987)
 - Note that this is a broad definition, encompassing all standards influencing accountants, regardless of their source.

Rules-orientation of standards

- Continuum from “principles” to “rules”
- Bright-lines, scope and legacy exceptions, highly detailed, voluminous implementation guidance
 - Mergenthaler 2009, Kohlbeck and Warfield 2010
- We assume that rules-oriented standards constrain behavior more than principles-oriented.
- We assume that rules-oriented standards are more complex than principles-oriented standards.

Research Questions

How rules-oriented are accounting standards?

So what if they are?

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Scarcity of counterfactuals.

The Counterfactual Problem

“FASB standards are rules-based.”

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Compared to what?

Answering “Compared To What?”

Easier

$N \approx 10,000,000$

Examples:

- Individual-level Census data
- transaction-level data

$N \approx 5,000$

Example:

- firm-level COMPUSTAT

$N \approx 1$

Examples (“macro-institutions”):

- SEC
- U.S. accounting profession

Harder

Popular approaches when $N \approx 1$

- Ask an expert
 - Psychologists tell us this doesn't work too well for complex tasks. Simple models do better.
 - Tetlock (2006), Meehl (1954), Libby (1976)
- Historical comparisons
 - Few degrees of freedom.
- Cross-jurisdictional comparisons
 - Few degrees of freedom.
 - Lack of variation (due to mimetic isomorphism and path dependence).

Popular approaches when $N \approx 1$

- Ask an expert
- Historical comparisons
- Cross-jurisdictional comparisons
- **Our proposal: compare U.S. occupations**
 - Common institutional environment
 - Lots of variation in systems of standards
 - Good, free data

Part 1:
Rules-Orientation of
Occupational Standards

Theories of Occupational Rules

Benefits of Rules

- Knowledge dissemination
 - Codify and disseminate knowledge
 - Speed learning
 - Ease replication
- Coordination
 - Avoid effort duplication
 - Network externalities
- Protection against catastrophic losses
 - Physical and financial
- Bargaining Power

Costs of Rules

- Creativity
 - Limit options for innovation
 - Inhibit competitive discovery process
- Judgment
 - Displace expert judgment
 - Reduce attractiveness to next generation of workers
- Anti-competitive barriers to entry
- Implementation Costs
- Strategic disadvantage
 - Rules can make workers predictable and, therefore, exploitable.

Data

- O*NET 4.0 (2002)
 - Occupation characteristics rated by “occupational analysts”
- Occupational Employment Statistics (2000)
 - Occupation sizes
- Both organized according to Standard Occupational Classification (SOC)

Model

$$\begin{aligned} \text{Complexity of Standards}_i &= \beta_0 \\ &+ \beta_1 \text{ Importance of Standards}_i \\ &+ \beta_2 \text{ Job Complexity}_i \\ &+ \beta_3 \text{ Coordination}_i \\ &+ \beta_4 \text{ Legal Risk Financial}_i \\ &+ \beta_5 \text{ Legal Risk Physical}_i \\ &+ \beta_6 \text{ Negotiation}_i \\ &+ \beta_7 \text{ Creativity}_i \\ &+ \beta_8 \text{ Knowledge of Law}_i \\ &+ \beta_9 \text{ Inspection}_i \\ &+ \beta_{10} \text{ Size}_i \\ &+ \varepsilon_i \end{aligned}$$

Model

Complexity of Standards _i = β_0	O*NET Var.
+ β_1 Importance of Standards _i	O*NET Var.
+ β_2 Job Complexity _i	Factor
+ β_3 Coordination _i	Factor
+ β_4 Legal Risk Financial _i	Factor
+ β_5 Legal Risk Physical _i	Factor
+ β_6 Negotiation _i	Factor
+ β_7 Creativity _i	Factor
+ β_8 Knowledge of Law _i	O*NET Var.
+ β_9 Inspection _i	Factor
+ β_{10} Size _i	OES
+ ε_i	

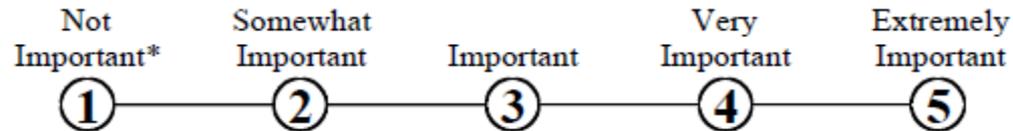
O*NET Standardization Question

(Figure 1)

7. Evaluating Information to Determine Compliance with Standards

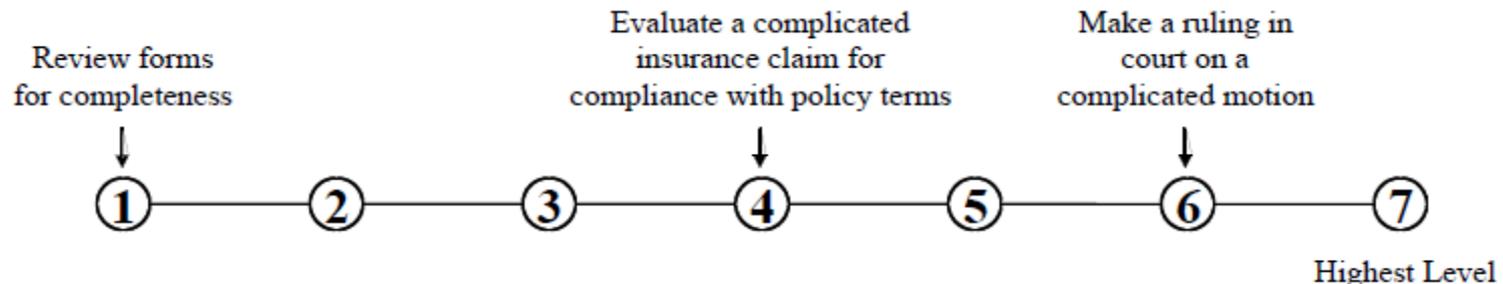
Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.

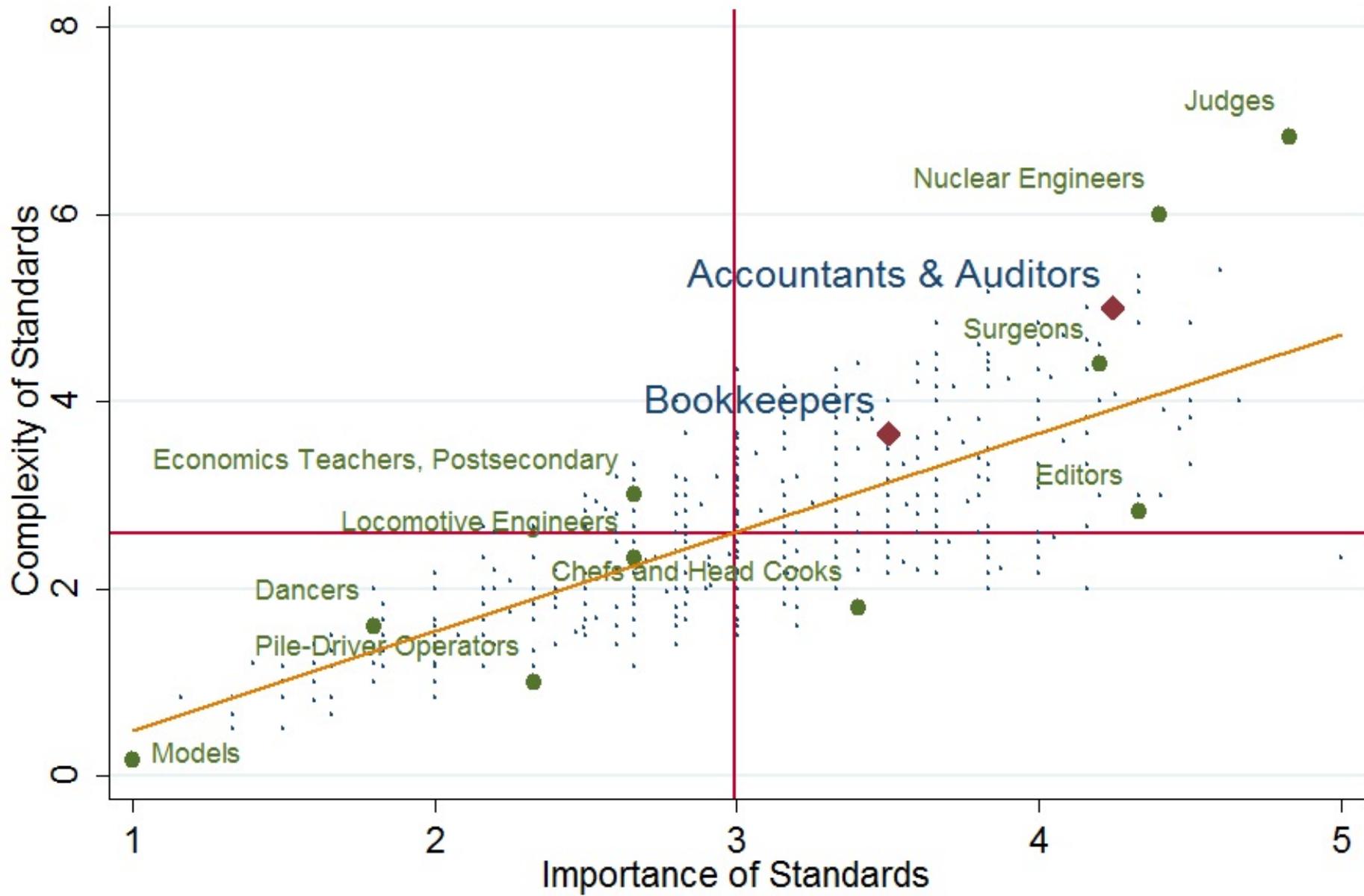
A. How important is EVALUATING INFORMATION TO DETERMINE COMPLIANCE WITH STANDARDS to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next activity.

B. What level of EVALUATING INFORMATION TO DETERMINE COMPLIANCE WITH STANDARDS is needed to perform *your current job*?





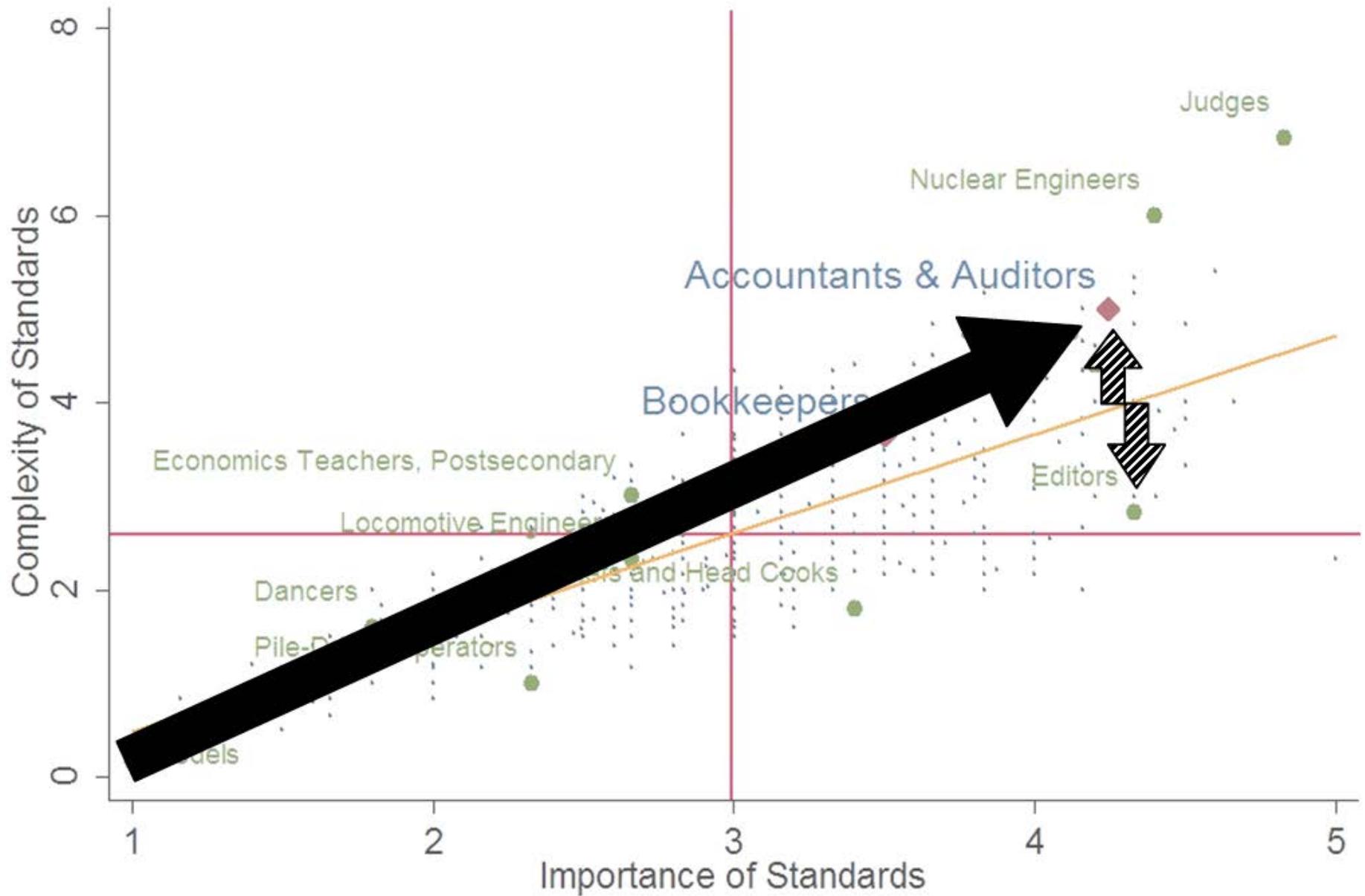


TABLE 2
Descriptive Statistics, Values, and Rankings for Auditors

Variable Description	Mean	Median	Min	Max	n	Accts. & Auditors	
						Value	Percentile
Rules-Orientation	2.60	2.50	0.16	6.83	581	5.00	98.8%
Importance of Standards	2.99	3.00	1.00	5.00	581	4.24	96.2%
Complexity	0.00	-0.16	-1.77	2.40	581	1.54	91.6%
Coordination	0.00	-0.23	-1.48	2.86	581	0.79	76.1%
Legal Risk Financial	0.00	-0.19	-1.73	2.60	581	1.38	90.7%
Legal Risk Physical	0.00	-0.15	-1.24	3.45	581	-0.79	21.5%
Negotiation	0.00	-0.34	-1.31	3.03	581	0.54	69.4%
Creativity	0.00	-0.21	-1.85	2.60	581	0.69	72.8%
Knowledge of law and gov't.	1.25	1.00	0.00	6.16	581	3.25	93.8%
Inspection	0.00	-0.27	-0.44	9.23	581	2.04	95.5%
Occupation Size	12.40	11.06	6.49	77.82	581	25.95	96.7%

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TABLE 4
Regression Explaining the Rules-Orientation of Occupational Standards

Variable	Predicted Sign	Coefficient Estimates
Importance of Standards	+	0.572***
Complexity	+	0.838***
Coordination	+	0.083***
Legal Risk Financial	+	-0.131††
Legal Risk Physical	+	-0.021
Negotiation	+	-0.035
Creativity	-	-0.196***
Knowledge of law and government	+	0.091***
Inspection	-	0.015
Occupation Size	+	-0.001
Constant		0.779
R ²		0.895
Observations		581

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Occupation	Rules-Orientation	Prediction	Error	Error Rank	N	Error %ile
Accountants & Auditors	5.00	4.55	0.45	47	581	91.9%

Part 1 Conclusions:

- We can model the rules-orientation of occupational standards
 - Cross-section of occupation is a fruitful source of “imagined worlds”
- The standards used by accountants appear to be exceptionally rules-oriented

Part 2:
Rules, Principles and the
Professional Accounting Discourse

Standardization and Discourse: Theory

- Standardization inhibits debate
 - Baxter (1962), Zeff (1986)
- Standardization displaces professional judgment
 - Baxter (1979), Sunder (2005), Pollock (2005)
- Standardization reduces the quality of accounting education
 - Review: West (2003)

Standardization and Discourse: Theory

- Professions have distinct knowledge (Abbott 1988)
- Interacting networks of professionals:
 - Share knowledge (Friedson 2001)
 - Innovate through synthesis of information (Padonky and Page 1998)
 - More participants means more total knowledge
 - More diverse participants means more unique knowledge

Data

- Accountants' Handbook
 - “the standard reference work” (Zeff 1963, 883).
 - Old book with many editions (passed market test)
 - We use 1943, 1956, 1970, 1981, 1991, 1996, 1999, 2003, 2007
- Citations
 - Definition: a mention of a source which is not the author
 - Used for persuasion and to give credit
 - Brooks (1985, 1986), White (2004)
 - Citations measure participation and influence

Steps in the process

1. Identify “principles-only” and “switch” accounting topics
2. Collect citations from relevant *Handbook* editions
3. Adjust them to be on a citations-per-page basis
4. Classify citations to standard-setters vs. non-standard-setters
5. Examine how the citations trends differ in principles-only versus switch topics

TABLE 7

Switch and Control Topics and Their Location in the *Handbooks* from Which Data Were Collected

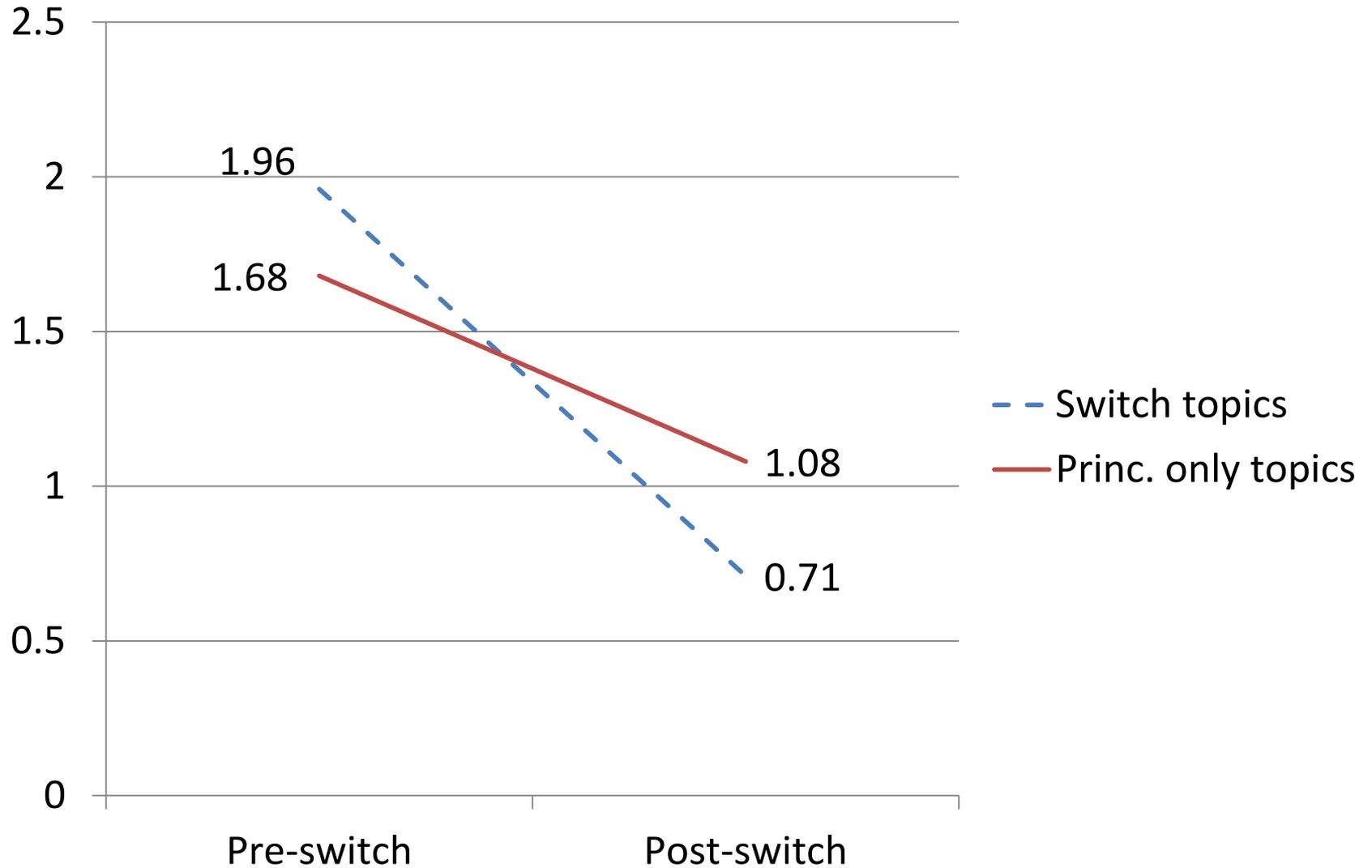
Edition	Year	<u>Switch Topics</u>				<u>Control Topics</u>		
		Tax	Leases	Hedge	Pensions	Inventory Valuation	Intangibles	Bad Debt
3	1943		index			10	15	index
4	1956	27	index		index	12	19	index
5	1970	index	<u>index</u>		index	12	19	index
6	1981	<u>13</u>	26	index	<u>27</u>	18	23	index
7	1991	17	16	index	26	13	15	index
8	1996	18	17	<u>20</u>	32	14	16	index
9	1999	19		21	32	15	17	index
10	2003			24		18	20	index
11	2007			26		20	22	index

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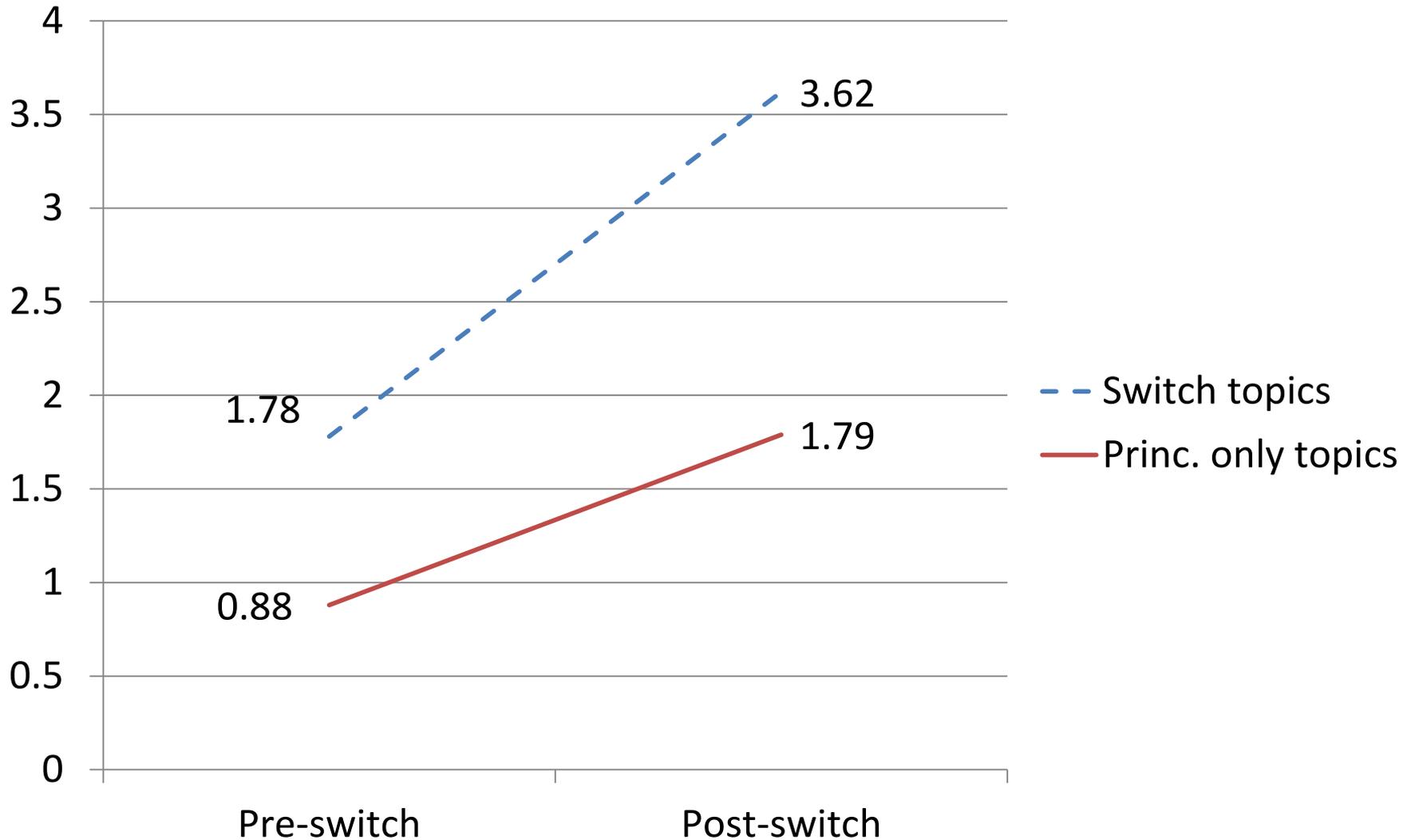
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9	1999	19		21	32	15	17	index
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Citations-per-page to non-standard-setters



Citations-per-page to standard-setters



Part 2 Conclusions:

- In both switch and principles-only topics, our evidence is consistent with standard-setters “crowding out” other dialogue participants.
- The crowding out effect is particularly potent for topics governed by rules-oriented standards.

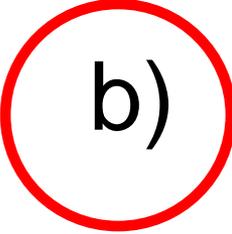
Confession

- This paper is deeply flawed.
 - We can't measure some of the things we'd like to.
 - The measurements we have are noisy.
 - We are working with imprecisely defined constructs.
- There are not easy fixes.

Confession

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- **“Why should I listen to you then?”**
 - a) You shouldn't. The flaws mean the tests are uninformative.
 - b) You should. There is something to be learned despite the flaws.

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Confession

- Specific flaws
 - “Occupational analysts” are not accountants.
 - We can’t isolate the standards people care about (FASB, IASB, Audit).
 - Our dependent variable may not measure “rules-orientation.”
 - We can’t say whether the narrowing of the discourse is dangerous or benign.

Confession

- Specific flaws
 - “Occupational analysts” are not accountants.
 - We can’t isolate the standards people care about (FASB, IASB, Audit).
 - Our dependent variable may not measure “rules-orientation.”
 - We can’t say whether the narrowing of the discourse is dangerous or benign.
- The big question:
 - Is the paper informative despite the flaws?
 - Or do the flaws invalidate the whole exercise?



Thank you!