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How Can Financial Reporting Standards Resist Accounting-Motivated Financial Engineering?

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How Can Financial Reporting Standards Resist Accounting-Motivated Financial Engineering?

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An Overview

- Important aspects of financial engineering are aimed at evading rules of financial reporting
- Many examples
- An **Impossibility Theorem**: inherent limitation of rule making relative to financial engineering
- What might be done?
 - Deficient conceptual framework
 - Revisit the drafting process
 - Introduce field testing
 - Abandon the futile rules vs. principles debate
 - Shift focus from written rules towards social norms, culture and representational faithfulness
 - Let us do our own thinking about functions of accounting (stop outsourcing it)

Financial Reporting vs. Engineering

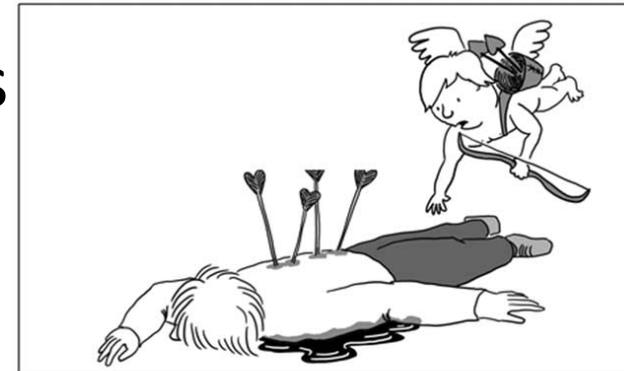
- Accounting regulation → cat-and-mouse game between rule makers and preparers
 - Eight decades: rules issued to “improve” reports (expansion from six paragraphs to about 30k pages)
 - Engineers redesign transactions to circumvent the intent of rule makers
- The mouse (of financial innovation) easily out-paces the regulatory cat(s) (SEC, FASB, PCAOB, etc.)
 - E.g., attempts to put long-term leases on the balance sheet
- Theorem: Rule-makers cannot win this game
- How can they stay in the game and retain some self-esteem?



"Remember me?"

Lease Accounting

- CAP: ARB 38 (1949): reveal long term lease payments
- Accounting Research Study 4
- APB Opinions 5, 7, 27, 31
- SEC Accounting Series Releases 132, 141, 147
- FASB FAS 13 in 1976: 4 bright line criteria
- Intentions vs. consequences
- Redesign and a flood of responses
 - 25 in six years



...Hello? Gary?

Table 1: Lease Accounting Standards

Year	Author	Doc	Title
1966	APB	APB Opinion 7	Accounting for Leases in Financial statements of Lessors
1972	APB	APB Opinion 27	Accounting for Lease Transactions by Manufacturer or Dealer Lessors
1973	SEC	ASR 132	Reporting of Leases in Financial Statements of Lessees
1973	SEC	ASR 141	Interpretations and Minor Amendments Applicable to Certain Revisions of Regulation S-X
1973	APB	APB Opinion 31	Disclosure of Lease Commitments by Lessees
1973	SEC	ASR 147	Notice of Adoption of Amendments to Regulation S-X Requiring Improved Disclosure of Leases
1974	FASB	DM	An Analysis of Issues Related to Accounting for Leases
1975	FASB	ED	Accounting for Leases
1976	FASB	ED (revised)	Accounting for Leases
1976	FASB	FAS 13	Accounting for Leases

1977	FASB	FASB Interpretation 19	Lessee Guarantee of the Residual Value of Leased Property
1978	FASB	FASB Interpretation 21	Accounting for Leases in a Business Combination
1978	FASB	FAS 22	Changes in the Provisions of Lease Agreements Resulting from Refundings of Tax-Exempt Debt
1978	FASB	FAS 23	Inception of the Lease
1978	FASB	FASB Interpretation 23	Leases of Certain Property Owned by a Government Unit or Authority
1978	FASB	FASB Interpretation 24	Leases Involving only a Part of a Building
1978	FASB	FASB Interpretation 26	Accounting for Purchase of a Leased Asset by the Lessee During the Term of the Lease
1978	FASB	FASB Interpretation 27	Accounting for a Loss on a Sublease
1979	FASB	FAS 26	Profit Recognition on Sales-Type Leases of Real Estate
1979	FASB	FAS 27	Classification of Renewals of Extensions of Existing Sales-Type or Direct Financing Leases
1979	FASB	FAS 28	Accounting for Sales with Leasebacks
1979	FASB	FAS 29	Determining Contingent Rentals
1979	FASB	Technical Bulletin 79-10	Fiscal Funding Clauses in Lease Agreements
1979	FASB	Technical Bulletin 79-11	Effects of a Penalty on the Terms of Lease
1979	FASB	Technical Bulletin 79-12	Interest Rate Used in Calculating the Present Value of Minimum Lease Payments
1979	FASB	Technical Bulletin 79-13	Applicability of FAS 13 to Current Value Financial Statements
1979	FASB	Technical Bulletin 79-14	Upward Adjustment of Guaranteed Residual Values
1979	FASB	Technical Bulletin 79-15	Accounting for Loss on a Sublease not Involving the Disposal of a Segment
1979	FASB	Technical Bulletin 79-16	Effect of a Reduction in Income Tax Rate on the Accounting for Leveraged Leases
1979		Technical Bulletin 79-17	Reporting Cumulative Effect Adjustment from Retroactive Application of FAS 13
1979	FASB	Technical Bulletin 79-18	Transition Requirement of Certain FASB Amendments and Interpretations of FAS 13
1980	FASB	Technical Bulletin 79-16 (Revised)	Effect of a Change in Income Tax Rate on the Accounting for Leveraged Leases
1980	IASC	ED (E19)	Accounting for Leases
1982	IASC	IAS 17	Accounting for Leases

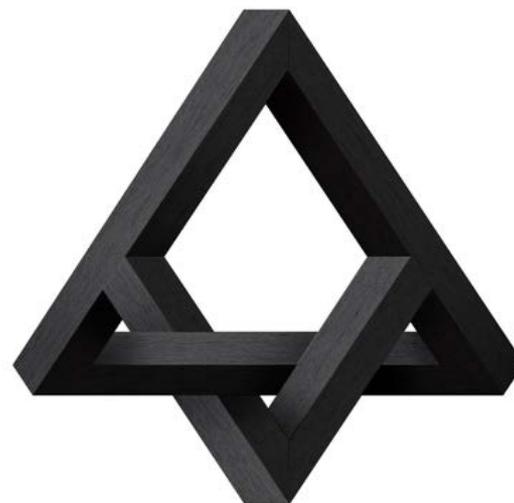
1982	IASC	IAS 17	Accounting for Leases
1997	IASC	ED (E56)	Leases
1997	IASC	IAS 17 (revised)	Leases
2003	IASB	IAS 17 (revised)	Leases
1996	G4+1	Special Report	Accounting for Leases: A New Approach
1999	G4+1	Special Report	Leases: Implementation of a New Approach
2005	FASB/IASB	Proposed FSP FAS 13-a	Accounting for a Change or Projected Change in the Timing of Cash Flows Relating to Income Taxes Generated by a Leveraged Lease Transaction
2009	FASB/IASB	Discussion Paper	Leases: Preliminary Views
2010	FASB/IASB	Proposed Standards Update	Proposed Accounting Standards Update—Leases (Topic 840)
2013	FASB/IASB	Proposed Standards Update	Leases (Topic 842): A Revision of the 2010 Proposed FASB Accounting Standards Update

Institutional Disadvantage

- 65-year long saga
- Unclear how many leases the regulators want capitalized are on the balance sheet today
- Do bright line criteria help improve financial reporting? If not, what else?
- Institutional disadvantage of regulators
 - Engineers are faster
 - Unconstrained (due process, constituents)
 - Summers: World War II vs. Convergence Project
- Can we continue to hope that the next standard from Norwalk/London will address the issue?

An Impossibility Theorem: Background

- Demski 1973:
 - Accounting rules \equiv partition of the state space
 - Blackwell: finer partition \rightarrow more informative partition
 - Most partitions are non-comparable in fineness
 - Therefore most information systems cannot be comparable in their informativeness
- No financial engineering in Demski's world



Five Definitions

- A ***reasonable*** financial standard partitions the transaction attribute space into two or more parts and preparer has a strict preference ordering of how a specific transaction is classified
- A ***metric*** $d(.)$ measures proximity (distance), or similarity (differentiation) between any pair of transactions
- Attribute space of transactions is ***dense***.
- ***Engineered*** transactions designed to be classified into the preferred cell of a given partition
- Cost of engineering is ***continuous*** in the distance d between the original and engineered form of the transaction

An Impossibility Theorem

- Any *reasonable* accounting standard in an economy where the set of accounting transactions is *dense* and the cost of financially *engineered* transactions is *continuous* in the *distance* created through modification of transactions will induce at least some firms to alter classification through financial engineering



Proof

- Any transaction has two or more potential accounting treatments (reasonableness)
- Transactions can be moved through the attribute space through reengineering
- Cost of reengineering is continuous in the distance moved
- There will always be some transactions sufficiently close to the partition boundaries (thresholds) so the cost of reengineering them to change their classification will be smaller than the prepare preference for reclassification (i.e., report contingent payoffs)
- Transactions being endogenous (chosen by man, not nature), no written rules can help accountants in this respect

Implications

- Smaller the cost of moving across attribute space, larger the benefit of reclassification, greater will be the prevalence of financial engineering
- We should expect engineered transactions to be bunched up against any the bright line thresholds in the attribute space
- This theorem does not yet consider adding new dimensions to attribute space, a favorite method of engineers
 - When regulators specify a partition on n dimensional attribute space, engineers simply add one or two extra dimensions by adding new attributes (e.g., contingent or minimum lease payments, bargain purchase option, etc.)
 - Is there a way for the regulators to anticipate these new dimensions?

Thinking about Accounting Regulation

- Clear rules/guidance vs. ambiguous or general principles: greater specificity facilitates financial engineering
- Regulatory control over terms of transactions: seems infeasible in our legal system outside banks and other regulated industries
- Accountants face the sorites paradox: the paradox of the heap (arising from vagueness in definition of predicates)
 - Imagine regulation of school uniforms

Thinking about Accounting Regulation

- Failure to recognize the conflict between the rule-makers' and preparers' goals
 - Preparers may see rules as an adversarial, not a co-operative endeavor
- Based on an outdated decision-usefulness perspective from the 1960s and Hicksian income under complete and perfect markets (partial vs. general equilibrium). Which use?
- Is transparency always good? Is earnings management always bad (Arya, Glover, Sunder, 1998)?
- What about reporting incentives? Ijiri's stewardship focus?
- Recent version of conceptual framework of the FASB lop-sided (no real trade-offs): Maximize relevance subject to a representational faithfulness constraint.

Thinking about Accounting Regulation

- Conservatism and matching are criticized rather than viewed as survivors of evolution we should study and learn from.
- Dominance of design over emergent perspective in accounting regulation, in spite of evidence to the contrary
- The Wheat Commission Report (1972) recommended involving academics in any conceptual framework. The FASB initially borrowed from the Trueblood Committee Report (1973) but has since developed the framework on its own.
- Academics can inflict much harm when appointed as regulators

Accounting and Executive Compensation

- Using compensation as a carrot for performance requires performance data
- Accounting data can be only so hard, and yield when subjected to powerful incentives
- Relative performance evaluation (explicit or implicit) seems to add more fuel.
- A good example of how standard setting and regulation can have unintended adverse consequences (Murphy, 2012).
- Apply some of the economic models of compensation to financial accounting standard setting and regulation.

The Reporting Culture: From “Compliance, Manipulation, & Everyone Else Does It” to “Communication and Integrity”

- How do we move from a compliance culture to a communication and integrity culture?
-
- Can be thought of as a multiple equilibria problem
-
- “If you’re not doing it, you’re falling behind,” he said. “It’s not obviously - shall we say - the moral thing to do, but I’m not willing to sacrifice my personal performance and four years of hard work for someone that is willing to do it and get away with it.”
- [Cameron van der Burgh](#)
- Gold Medal “winner” in the 100m breaststroke

The Reporting Culture: From “Compliance, Manipulation, & Everyone Else Does It” to “Communication and Integrity”

- Let’s apply the ideas on team incentives to creating better norms in financial reporting:
- Emergent norms—norms that emerge from practice.
- Good norms reinforced by self-policing and regulation—team incentives/mutual monitoring.
- Bad norms targeted by regulation—targeting tacit collusion (the financial reporting cartel).
- Individual incentives (the status quo?)
-
- Potential interaction between emergent norms, self-policing, and regulation: they should be setup to reinforce rather than undermine each other.

An Example: Conservatism

- Dates back to at least 1406 (Littleton, 1941).
- Hatfield: “The accountant transcends the conservatism of the proverb, ‘Don’t count your chickens before they are hatched,’ saying ‘Here are a lot of chickens already safely hatched, but for the love of Mike use discretion and don’t count them all, for perhaps some will die.’”
- Conservatism limits premature payouts/rewards by delaying the recognition of good news until uncertainty is resolved (Glover and Lin, 2013), which is a perspective that is not emphasized in the recent wave of theoretical papers on conservatism. Almost all of the existing models are of single-period settings.
- Conservatism offsets managerial opportunism (Gao, 2013).

Emergent Norms

- George O. May's evolutionary view of accounting standards, emerging from practice. Supplemented by ample disclosure.
- This was the approach followed by the Committee on Accounting Procedure (1939-1959), before the APB (1959-1973) and especially the FASB.
- Positive view of standard setting in the sense that standard setters look to practice to learn from and generalize in developing standards.
- Consistent with emergent norms, pruned by standard setters.
- Hayek's final work *Fatal Conceit*: Central planners are wrong because they disregard the fact that modern civilization naturally evolved and was not planned (*extended order*)
 - *Fatal Conceit*: We have enough understanding of social systems to design them to achieve specified objectives

Emergent Norms

- Arguably, the FASB's approach has been to come up with its own solutions to financial reporting problems rather than looking to practice for examples of good reporting.
- That is, we have Generally Imposed Accounting Principles, limiting the room for good norms to emerge from practice.
- To some extent, the FASB was created in 1973 because of the view that practice-based standards were too permissive and ad-hoc/not based on a conceptual framework.
- The formation of the FASB can be seen as the point at which standard setters and academics traded places in their normative vs. positive orientations. Are we the prince or the pauper?
- Accounting regulators appear to have this conceit in abundance

Norms Overseen by Discretionary Regulation

- Regulation and standard setting could set the stage for mutual monitoring—a less ambitious (and less costly) role for regulators and standard setters that seems also to provide less room for them to be captured by various political or economic interest groups.
- Standard Setting: Detailed guidance gets in the way of mutual monitoring. Guidance reduces the situations in which the choice is left to the preparers, reducing the frequency of future self-governed interactions.
- Regulation: Enforcement based on RPE can undermine incentives for mutual monitoring (similar to Glover and Xue, 2013). Bailing firms out when they all “misunderstand” what the appropriate accounting treatment is can also foster coordinated bad reporting.

Preparer – Financial Engineer Mutual Monitoring

- For the preparer-financial engineer relationship (or the preparer-auditor relationship), we can use joint penalties to tie the preparer and the financial engineer together. Has the SEC been aggressive enough?
- Key ingredients:
- Environment of joint responsibility (similar penalties)
- Long-term relationships and mutual observability, usually viewed as a problem because of collusion, are to be fostered. Collusion can be turned into cooperation (beneficial to shareholders if the regulator provides the right incentives).
- Joint good behavior does not have to be a static (one-period) equilibrium, which is the source of the cost savings.

How do we make joint good behavior more attractive than joint bad behavior?

- Better enforcement of disclosure rules (e.g., 12b-20). Why not require disclosures about external advice on structuring transactions to achieve an accounting objective?
 - Financial engineers will move in-house?
- SEC could again require additional disclosures for specific transactions, as they did for the accelerated vesting of employee stock options. Requiring firms to disclose all accounting-motivated transactions makes less sense.
 - Disclosure overload?
- If the transaction could have been replicated with simpler arrangement (e.g., 1 contract instead of 2), adopt (or disclose) the accounting treatment of the simpler transaction.
 - What is “one” transaction?
- Have financial engineers register with the SEC products (and customer lists) that describe accounting treatment as a feature.
 - Beyond the mandate given to the SEC
- List of approved transactions (e.g., standard operating leases)?
 - Big Brother government?

SEC's Role in Targeting Bad Norms

- “Wild-cattling” in the Division of Enforcement:
- Stephen Cutler (2004): “In addition to these more concrete reforms, we’re also fostering a subtle cultural change within the enforcement program to encourage more risk taking. By risk, I mean pursuing investigations where, at the outset, it is not clear that a securities violation has occurred. We need to reach beyond investigating the cause of every announced restatement, to probe industries or practices about which we have concerns or suspicions, but no clear roadmap to wrongdoing. I recognize that taking such risks is not costless. Inevitably, in more of these situations than in others we investigate, we will conclude that there is no case to be brought. Nevertheless, if we can develop a culture that encourages taking the well-reasoned risk – including the risk that the Commission will bring fewer but more important cases each year – I think the enforcement program will be more effective in protecting the investing public.”
 - Will such enforcement targeting be “fair”?

Bottom Line: Compensation

- Greater appreciation for:
 - Team incentives (less incentive pay?)
 - The limits of relative performance evaluation, including incentives to:
 - Increase risk using operating choices, capital structure, and derivatives.
 - Report aggressively
- Greater use of traditional accounting-based rewards over options, or at least performance-based vesting (of options and stock) that depends on absolute accounting performance.

Bottom Line: the FASB

- Focus on the comparative advantage of accounting over other information sources, including judicious use of recognition thresholds, rather than trying to make accounting reflect the underlying economics of all events.
- Do less. View accounting standard setting as a (largely) positive endeavor. Try to understand and learn from accounting practices that seem to be robust (e.g., conservatism and matching).
- Announce a prize for the best approach to circumventing any proposed standard.
- Involve academics in any work on the conceptual framework, as the Wheat Committee suggested in 1972 (but be careful in giving them a vote).

Bottom Line: the SEC

- Greater recognition of the role of culture/norms and the interaction between culture, standard setting, and regulation.
- In general, seek a better understanding of interactions.
- Enforcement's wild-cattling and OCA's pre-clearance process seem to be exemplary mechanisms for changing the culture. Is the current leadership of the SEC doing enough wild-cattling?
- Target specific engineered transactions for disclosure. Consider more aggressive means of tying preparers and financial engineers (and auditors) together, including registering products and client lists with the SEC.
- Consider longer-term appointments for the Chief Accountant.
- Stop looking for corner solutions, for example, over-emphasizing nominal board independence (Corona, Glover, and Zheng, 2013).

Bottom Line: Academics

- Become more involved in normative research, particularly policy debates and policy-oriented research (including research that addresses counterfactuals).
- Correlation = causation is not it. Let us stop playing word games like “effect”, “consequence”, “impact”, and “value relevant” when all we mean is statistical correlation
- Teach students more about asset pricing but also the limits of asset pricing models (e.g., perfect and complete markets, partial vs. general equilibrium, small individual investors vs. coordination on the same models).
- Teach incentive theory (e.g., adverse selection and moral hazard), i.e., don’t make accountants rediscover Akerlof on their own.
- More research/teaching on team-based incentives and the pitfalls of relative performance evaluation.
- More attention to culture, social norms, and decentralized systems (as opposed to central planning)

Thank You!

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