ACCT 703 Analytical Methods (2021)

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Purpose of this course

For those working on accounting empirics, theory underlies the motivation, intuition, and interpretation of our work. As such, having an appreciation for theory and some experience in how to approach the theory literature makes it easier to form research ideas, develop hypotheses, and understand the results of our work.

This course aims to provide a broad overview of different literatures in accounting theory which complements students' first year of course work. The selected papers challenge you to think more broadly about what accounting is, how it works, and what it should be. The focus of the course will not be on the mathematics behind the papers, but instead on the intuition and understanding the papers provide.

Presentations

To facilitate discussion in each class session, one paper (usually the less technical paper) will be presented by a pair of students. Every student taking the course for a grade is expected to present at least twice. Papers for presentation are indicated with **.

Assignments

To build understanding and familiarity with economic models, there will be two analytical assignments. The first assignment will be in week 4, and the second will be in week 6. These will involve some mathematics, but instruction will be provided where necessary to ensure that they are manageable.

Solutions should be submitted electronically by email. You can either type (using LaTeX, etc.) or handwrite and scan your solutions.

1. Contracting in binary problems
   - A Binary Moral Hazard Problem
   - A Binary Adverse Selection Problem
2. Voluntary Disclosure Problems
   - Full Disclosure
   - Partial Disclosure
   - Ex Ante Welfare

Note

All materials are in the order that I would recommend reading them in. Optional materials are indicated as such.

Papers prefixed with ** are generally easier to read and will be covered by you. Those without a prefix are typically more difficult, and will be covered by the professor. Those preceeded by † are difficult to find online and will be provided for you.

Schedule

Week 1: Bookkeeping and Double Entry

- What is accounting?
- What should accounting be?
- How can we represent accounting, formally?
- Required:
    1. †*Chapter 1: Double-Entry Bookkeeping Appetizer* by Pierre Liang
        - Only pages 2 through 5
    2. Arya, Anil, John C. Fellingham, and Douglas A. Schroeder. "Estimating transactions given balance sheets and an income statement." Issues in Accounting Education 15.3 (2000): 393-411.
    3. Arya, Anil, John C. Fellingham, Jonathan C. Glover, Douglas A. Schroeder, and Gilbert Strang. "Inferring transactions from financial statements." Contemporary Accounting Research 17, no. 3 (2000): 366-385.
- Optional:
    - †Hatfield, Henry Rand. "An historical defense of bookkeeping." Journal of Accountancy (pre-1986) 37, no. 000004 (1924): 241.
        * An interesting perspective on why accounting matters penned nearly 100 years ago, yet many of the points are equally valid today.

Week 2: Accounting Standards

- What can accounting standards accomplish?
- What can accounting standards *not* accomplish?
- How should we think about accounting standards?
- Required:
    1. †**Ijiri, Yuji. "A defense for historical cost accounting." Asset valuation and income determination (1971): 2-14.
    2. Demski, Joel S. "The general impossibility of normative accounting standards." The Accounting Review 48, no. 4 (1973): 718-723.
- Optional:
    - Friedman, Milton. "The methodology of positive economics." (1953): 259.

Week 3: Risk and Rationality

- What is risk?
- How can we measure risk?
- How do rational individuals behave?
- Required:
    1. Rothschild, Michael, and Joseph E. Stiglitz. "Increasing risk: I. A definition." Journal of Economic theory 2, no. 3 (1970): 225-243.
    2. Grossman, Sanford. "On the efficiency of competitive stock markets where trades have diverse information." The Journal of Finance 31, no. 2 (1976): 573-585.
    3. **Arrow, Kenneth J. "Risk perception in psychology and economics." Economic inquiry 20, no. 1 (1982): 1-9.

- Optional:
  - Grossman, Sanford J. "An introduction to the theory of rational expectations under asymmetric information." The Review of Economic Studies 48, no. 4 (1981): 541-559.

Week 4: Contracting and Agency Theory

- What is measurement?
- In what ways does contracting behave like we would expect?
- In what ways does contracting *not* behave like we would expect?
- Required:
  1. **Ijiri, Yuji. Theory of accounting measurement. No. 10. American Accounting Association, 1975.
     - Chapter 3: The Nature of Accounting Measurement
  2. Dutta, Sunil, and Stefan Reichelstein. "Leading Indicator Variables, Performance Measurement, and Long-Term Versus Short-Term Contracts." Journal of Accounting Research 41, no. 5 (2003): 837-866.
  3. Indjejikian, Raffi, and Dhananjay Nanda. "Dynamic incentives and responsibility accounting." Journal of Accounting and Economics 27, no. 2 (1999): 177-201.
- Optional:
  - Grossman, Sanford J., and Oliver D. Hart. "Implicit contracts under asymmetric information." The Quarterly Journal of Economics (1983): 123-156.
    * A difficult read given the amount of mathematics in it, but well worth a read.

Week 5: Classical disclosure Theory

- Endogeniety in disclosure decisions is a major difficulty in archival research. How do these papers shed light on the *endogenous* nature of disclosure?
- These papers propose two mechnisms to bring about incompleteness in disclosure. What other mechanisms might exist that lead to incompleteness in disclosure?
- Required:
  1. **Verrecchia, Robert E. "Essays on disclosure." Journal of Accounting and Economics 32, no. 1-3 (2001): 97-180.
     - NOTE: As this paper is quite long, you are welcome to skip over the mathematical parts and focus only on the intuition. For instance, for Section 2.3, I would suggest just focussing on the first two paragraphs and the final two paragraphs.
  2. Verrecchia, Robert E. "Discretionary disclosure." Journal of Accounting and Economics 5 (1983): 179-194.
  3. Dye, Ronald A. "Disclosure of nonproprietary information." Journal of Accounting Research (1985): 123-145.
  4. **Jung, Woon-Oh, and Young K. Kwon. "Disclosure when the market is unsure of information endowment of managers." Journal of Accounting Research (1988): 146-153.
- Optional:
  - Diamond, Douglas W., and Robert E. Verrecchia. "Disclosure, liquidity, and the cost of capital." The Journal of Finance 46, no. 4 (1991): 1325-1359.
    * This is a *very important paper*, particularly for anyone studying cost of capital
  - Kim, Oliver, and Robert E. Verrecchia. "Pre-announcement and event-period private information." Journal of Accounting and Economics 24, no. 3 (1997): 395-419.

Week 6: Present day disclosure Theory

- Required:
  - **Bertomeu, Jeremy, and Iván Marinovic. "A theory of hard and soft information." The Accounting Review 91, no. 1 (2015): 1-20.
  - Chen, Qi, Zeqiong Huang, and Yun Zhang. "The effects of public information with asymmetrically informed short-horizon investors." Journal of Accounting Research 52, no. 3 (2014): 635-669.
  - **Fishman, M. J., & K. M. Hagerty. "Mandatory versus voluntary disclosure in markets with informed and uninformed customers." Journal of Law, Economics, and Organization, 19, no. 1 (2003): 45-63.
  - †**Hummel, Patrick, John Morgan, and Phillip C. Stocken. "A Model of Voluntary Managerial Disclosure." (2021).
- Optional:
  - Dye, Ronald A., and Sri S. Sridhar. "Reliability-relevance trade-offs and the efficiency of aggregation." Journal of Accounting Research 42, no. 1 (2004): 51-88.
  - Dye, Ronald A. "Some recent advances in the theory of financial reporting and disclosures." Accounting Horizons 31, no. 3 (2017): 39-54.