



Spring Term 2019 (FS 2019)

**Doctoral Seminar
“Current Research Topics in Accounting Theory”**

Course schedule and reading list

1) Session schedule

Session	Day	Time	Room
1	Monday, 17.06.2019	10:00 – 11:30	KO2-F-175
2	Monday, 17.06.2019	12:00 – 13:30	KO2-F-175
3	Monday, 17.06.2019	15:00 – 16:30	KO2-F-175
4	Tuesday, 18.06.2019	09:00 – 10:30	KO2-F-175
5	Tuesday, 18.06.2019	11:00 – 12:30	KO2-F-175
6	Tuesday, 18.06.2019	14:30 – 16:00	KO2-F-175
7	Tuesday, 18.06.2019	16:20 – 17:50	KO2-F-175
8	Wednesday, 19.06.2019	10:00 – 11:30	KO2-F-175
9	Wednesday, 19.06.2019	13:00 – 14:30	KO2-F-175
10	Wednesday, 19.06.2019	15:00 – 16:30	KO2-F-175

2) Seminar content and reading list

**Part 1 (Sessions 1-5)
Fundamentals of Financial Accounting Theory: Communication and Markets,
with Applications to Theory-Based Estimation**

by Professor Jeremy Bertomeu, Associate Professor of Accounting, UCSD,
preferred email: jeremy.bertomeu@gmail.com

The aim of Part 1 is to provide you with tools to understand and build rigorous models relevant to behavioral, theoretical and empirical research in accounting. I will present four classic paradigms commonly used in existing research:

1. Disclosure theory (aka, persuasion): What news do firms voluntarily release, when their objective is to increase investors' beliefs about future cash flows?
2. Earnings management (aka, Spence signaling): Why do managers manipulate earnings if, under rational expectations, investors correct for their anticipated level of manipulation?
3. Standard Setting as Political Choice: What incentives affect mandatory disclosure choice? When are accounting standards efficient or inefficient?





My objective is to lay out foundations for reading, and writing, theory. At the end of the course, you should be able to answer, when conceiving a research design: What minimal assumptions do I need to make to make a particular prediction/hypothesis? How do these assumptions imply the prediction that I am making? Which core frameworks do my hypotheses borrow from?

Throughout the course, I will offer an elementary introduction to theory-based estimation, defined as an approach that uses economic models to guide the econometric specification. This will be achieved by way of examples that connect to particular theory, rather than a complete econometrics course, but is meant to open the door to further your interests in a new area of accounting research.

Session 1: Disclosure theory – Static Models

The module will take the form of an extended introduction to disclosure theory. This includes a subclass of models of communication in which an informed party chooses which information to reveal or withhold in order to affect a receiver's belief (or persuade). We will prove the classic Viscusi-Milgrom-Grossman-Hart unraveling theorem and, then, break the unraveling property in the presence of disclosure frictions: (a) the Dye-Jung-Kwon model of uncertain information endowment and (b) the Jovanovic-Verrecchia model of costly disclosure.

Required reading:

- 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.

Supplementary readings:

- Suijs, J., 2007. Voluntary disclosure of information when firms are uncertain of investor response. *Journal of Accounting and Economics*, 43(2), pp.391-410.
⇒ An alternative approach to breaking the unraveling theorem.
- Hughes, John S. and Pae, Suil, 2004. Voluntary disclosure of precision information. *Journal of Accounting and Economics*, 37(2), pp.261-289.
⇒ An application of disclosure theory to other types of information.
- Bertomeu, J. and Cianciaruso, D., 2015. Verifiable Disclosure. Available at SSRN 2649651..
⇒ A unified framework for all disclosure models.

Session 2: Disclosure theory – Dynamic Models

This module will cover extended topics in disclosure theory, along three extensions of the model. First, we relax the assumption of a single period and present the Einhorn-Ziv model of sticky disclosure, which offers a simple multi-period extension of the Dye-Jung-Kwon model. Second, we relax the assumption of truthful disclosure and develop properties of reports and prices in the Marinovic model of uncertain truthfulness. Third, we relax the assumption of exogenous disclosure costs, and develop the basic insights of the Lizzeri model of strategic certification.



Required reading:

- Einhorn, E. and Ziv, A., 2008. Intertemporal dynamics of corporate voluntary disclosures. *Journal of Accounting Research*, 46(3), pp.567-589.

Supplementary readings:

- Beyer, A. and Dye, R.A., 2012. Reputation management and the disclosure of earnings forecasts. *Review of Accounting Studies*, 17(4), pp.877-912.
⇒ Dynamic disclosure theory when managers also weight future prices.
- Marinovic, I. and Varas, F., 2016. No News Is Good News: Voluntary Disclosure in the Face of Litigation, *RAND Journal of Economics*, Vol. 47, No. 4, Winter 2016, pp.822-856.
⇒ Disclosure theory in the presence of litigation.
- Guttman, I., Kremer, I. and Skrzypacz, A., 2014. Not only what but also when: A theory of dynamic voluntary disclosure. *The American Economic Review*, 104(8), pp.2400-2420.
⇒ Strategic timing of disclosure.

Session 3: Structural Estimation of Disclosure Theory

This module will conclude using theory and econometrics as a stepping board to conduct theory- based estimation using real data. We will discuss how to implement three approaches to derive consistent estimators of disclosure frictions: the Bertomeu, Beyer and Taylor estimator of disclosure costs, the Bertomeu, Ma and Marinovic estimator of information endowment, and the non-parametric Cheynel and Liu estimator of disclosure costs and information endowment.

Required reading:

- Cheynel and Liu-Watts 2007. A Simple Structural Estimator of Disclosure Costs, *Review of Accounting Studies*, forthcoming.

Supplementary readings:

- Bertomeu, J., Ma, P. and Marinovic, I., 2016. How often do managers withhold information?. *Stanford GSB Working paper*.
⇒ Parametric approach to estimating the probability of information endowment.
- Bertomeu, J., Beyer, A. and Taylor, D.J., 2015. From Casual to Causal Inference in Accounting Research: The Need for Theoretical Foundations. *Foundations and Trends in Accounting*, Chapter 4 Structural Estimation.
⇒ Parametric approach to estimating disclosure costs.

Note: (optional) I recommend to bring a laptop with Matlab for this session.

Session 4: Untruthful Disclosure – Manipulation Costs

This module presents the classic Dye-Stein model of inter-temporal earnings manipulation, and we will establish proves that, in this framework, manipulation can persist despite being perfectly anticipated by investors. Then, we shall present the Fischer-Verrecchia model of uncertain price benefits and the Dye-Sridhar model of uncertain misreporting costs. Under



these extended approaches, earnings management destroys some of the information contained in earnings.

Required reading:

- Fischer, Paul E., and Robert E. Verrecchia. "Reporting bias." *The Accounting Review* 75, no. 2 (2000): 229-245.

Supplementary readings:

- Morgan, J. and Stocken, P.C., 2003. An analysis of stock recommendations. *RAND Journal of economics*, pp.183-203.
⇒ Communication without misreporting costs (i.e., cheap talk).
- Dye, R.A. and Sridhar, S.S., 2008. A positive theory of flexibility in accounting standards. *Journal of Accounting and Economics*, 46(2), pp.312-333.
⇒ Alternative approach to Fischer and Verrecchia (2000).
- Guttman, I., Kadan, O. and Kandel, E., 2006. A rational expectations theory of kinks in financial reporting. *The Accounting Review*, 81(4), pp.811-848.
⇒ Characterization of the set of semi-pooling equilibria in the Dye-Stein framework.
- Arya, A., Glover, J. and Sunder, S., 1998. Earnings management and the revelation principle. *Review of Accounting Studies*, 3(1-2), pp.7-34.
⇒ Issues relating to the interaction between contracts and earnings management.

Session 5: Political choice and Incentives in standard-setting

This model covers basic models that involve social choice over accounting standards, such that self-interested firms with a reporting objective collectively choose which standards they prefer. We shall first introduce the Bertomeu and Magee model of accounting choice with macro shocks to the set of project opportunities and formally derive how (and why) politically-driven standard-setting can contribute to financial crisis. Then, we extend this approach to endogenous standard-setting cycles, and show that political pressures can cause accounting standards to be unstable, especially when a standard-setter values transparency as an objective.

Required reading:

- Bertomeu, Jeremy, and Robert P. Magee. "From low-quality reporting to financial crises: Politics of disclosure regulation along the economic cycle." *Journal of Accounting and Economics* 52, no. 2 (2011): 209-227.

Supplementary readings:

- Friedman, H.L. and Heinle, M.S., 2016. Lobbying and uniform disclosure regulation. *Journal of Accounting Research*, 54(3), pp.863-893.
⇒ A model of costly lobbying.
- Friedman, H.L. and Heinle, M.S., 2016. Influence activities, coalitions, and uniform policies, *Purdue Theory Conference*.
⇒ On the formation of lobbies.
- Bertomeu, J. and Magee, R.P., 2015. Mandatory disclosure and asymmetry in financial reporting. *Journal of Accounting and Economics*, 59(2), pp.284-299.
⇒ Asymmetries in measurement caused by political pressures.



Course Requirements for Part 1 (Sessions 1-5)

I expect all students to have taken microeconomics (graduate) with some elementary coverage of game theory, and be familiar with basic calculus and probability topics, such as Lagrange multipliers, differentiation/integration and conditional expectations which would be covered in any math-for-econ refresher course.

Required Readings

I believe in reading few papers but reading them well so, for the most part, you will be given one reading per session. I expect you (1) to pay special attention to appropriate writing of theory, (2) be able to summarize the assumptions of a model, (3) state the main result, (4) conduct, with plain language but as logically as possible, the argument that underlies the main result. Readings may be parallel or complementary to a course module.

Software

Although **not required**, I suggest that you obtain access to the following software.

TeX. Assignments must be submitted in pdf done with TeX. Unfortunately, the limitations of MS Equation editor make it impossible to conduct any serious theory work with other software. I do accept assignments in Scientific Word although I do not recommend it because it is not compatible with other TeX editors. I recommend the (free) online TeX editor overleaf, and you can create an account on www.overleaf.com. There are also many other good options for running LaTeX offline such as winedt.com and texnic.com.

Mathematica. Mathematica is a great help to (i) quickly run otherwise completely uninteresting algebraic steps and minimize potential for error, and (ii) guide steps for proofs. Note that Mathematica is NOT a substitute for proofs, unless the steps used by Mathematica are entirely straightforward and reproducible.

Matlab. Matlab is an easy-to-use tool for numerical analysis. Unfortunately, fast computing on Mathematica requires more advanced knowledge of the language and, by contrast, Matlab relies principally on elementary knowledge of linear algebra to achieve reasonable computing speeds. I will conduct one session that makes use of Matlab.

Part 2 (Sessions 6-10)

Debt contracting, control rights, and information system design

by Professor Volker Laux, McCombs School of Business, The University of Texas at Austin



Session 6: Control rights, efficiency, and borrowing capacity

- Tirole, J., 2006, *The Theory of Corporate Finance*. Princeton University Press, Chapters 10.1 and 10.2.
- Bolton, P., and M. Dewatripont, 2004, *Contract Theory*. MIT Press, Chapter 11.3.1.
- Aghion, P., and P. Bolton, 1992, An Incomplete Contracts Approach to Financial Contracting, *Review of Economic Studies* 59 (3): 473-494.
- Hart, O., 2001, Financial Contracting, *Journal of Economic Literature* 39 (4): 1079-1100.

Session 7: Control rights and managerial effort

- Tirole, J., 2006, *The Theory of Corporate Finance*. Princeton University Press, Chapters 10.1 and 10.2.
- Hellmann, T., 1998, The Allocation of Control Rights in Venture Capital Contracts, *RAND Journal of Economics* 29: 57-76.
- Laux, V., 2019, Debt Covenants and Accounting Manipulation, working paper, available on SSRN.

Session 8: Control rights and accounting manipulation

- Laux, V., 2019, Debt Covenants and Accounting Manipulation, working paper, available on SSRN.
- Tirole, J., 2006, *The Theory of Corporate Finance*. Princeton University Press, Chapter 7.2.

Session 9: Information system design

- Kamenica, E., and M. Gentzkow, 2011, Bayesian Persuasion, *American Economic Review* 101: 2590-2615.
- Goex, R., and A. Wagenhofer, 2009, Optimal Impairment Rules, *Journal of Accounting and Economics* 48 (1): 2-16.
- Dordzhieva, A., V. Laux, and R. Zheng, 2019, Signaling Entrepreneurial Vision via Information System Design, working paper.

Session 10: Conservative accounting

- Gigler, F., C. Kanodia, H. Sapa, and R. Venugopalan, 2009, Accounting Conservatism and the Efficiency of Debt Contracts. *Journal of Accounting Research* 47: 767-97.
- Caskey, J., and V. Laux, 2017, Corporate Governance, Accounting Conservatism, and Manipulation, *Management Science* 63: 424-437.

3) Exam

Grading is based on a take-home homework (3 ECTS).