

**47-880 Accounting Theory
Carnegie Mellon University
Graduate School of Industrial Administration**

Spring 2000, Mini 5
Course 47-880
Class room: GSIA 318
Class time: Mondays & Friday, 2:30pm – 4:30pm

Instructors: Professor Jonathan Glover
GSIA 304, 268-8499
Professor Pierre Jinghong Liang
GSIA 212, 268-3315

Course Objective

This course will focus on an information content theme in accounting theory. This means we view accounting as a source of information. More broadly, this course focus on information questions, at the individual level and beyond. However, an economic orientation is stressed.

Information questions begin with the question of usage. Here an economic analysis almost always begins with expected utility representation and introduce information through probabilities. Contrary to folklore, preference representation is deep, subtle, and important. This course assumes familiarity with notions of ordinal utility, expected utility, subjective probabilities. Armed with such machinery, our journey starts.

Course Material

Textbook: Christensen, John, and Joel Demski, draft chapters from an upcoming accounting theory text.

Published and working papers listed below

Course Requirements

Homework occasional homework typically involves working out numerical examples of assorted models discussed in class.

Class Presentation each of you shall present in class at least three assigned papers.

Final Project each of you shall provide a detailed analysis (e.g., line-by-line proof) and critique of an analytic paper from the literature.

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Tentative Schedule**

Dates	Topics/papers	Readings
Friday 5/12	Appetizers (history and Demski Sappington 90)	CD ch 3, 4, 7
Monday 5/15	Feltham and Ohlson 1995 CAR (Hoon) Beaver and Demski 1979 AR (Chana)	
Friday 5/19	Informativeness Criterion (Marschak Miyasawa 68)	CD ch 5
Monday 5/22	Gjesdal JAR 1981 (Xue) Kim 1995 Econometrica (Haijin)	
Wed. 5/24	Information in Inter-organization Trades (Common Knowledge etc.)	CD ch 8, 9, 10
Friday 5/26	Antle, Demski and Ryan 1994 JAAF (Zhonglan) Demski and Feltham 1994 JAE (Hoon)	
Monday 5/29	Memorial Day, no class	
Friday 6/2	Trueman and Titman 1988 JAE (Xue) Demski and Frimor 1999 JAR (Zhonglan)	
Monday 6/5	Hart and Holmström 1987 AET (Chana) Prendergast 1999 JEL (Hoon and Xue)	
Friday 6/9	Information in Intra-Organization Trades	CD ch 11, 12
Monday 6/12	Demski and Sappington 1984 JET (Haijin) Villadsen 1995 JAE (Zhonglan)	
Wed. 6/14	Workshop on computational method (by Professor Harold Zhang)	
Friday 6/16	TBA	
Monday 6/19	No class	
Wed. 6/21	Holmström and Tirole 1991 JLEO (Chana) Melumad, et. al. 1992 JAE (Hoon)	
Friday 6/23	Information Interactions	CD ch 13
Monday 6/26	Holmström and Milgrom 1991 JLEO (Xue) Feltham and Xie 1994 AR (Chana and Haijin)	
Wed. 6/28	Accounting Structure: Recognition, Accruals, and Inventory, etc.	ch 14-19
Friday 6/30	Baldenius and Reichelstein 2000 WP (Haijin) Antle and Demski 1989 CAR (Zhonglan)	

Background

Sims, C., "Macroeconomics and Methodology," *Journal of Economic Perspectives* 1996 (Winter)

American Accounting Association, *A Statement of Basic Accounting Theory (ASOBAT)*, 1966

Beaver, W. H., and J. S. Demski, "The Nature of Financial Accounting Objectives: A Summary and Synthesis," *JAR*, supp.1973.

Butterworth, J. E., "The Accounting System as an Information Function," *Journal of Accounting Research* (1972): p. 1-27.

Feltham, G., *Information Evaluation*, AAA 1972

Demski, J. S., *Information Analysis*. Addison-Wesley, 1972.

Accounting Representation

*Feltham, G., and J. Ohlson, "Valuation and Clean surplus Accounting for Operating and Financial Activities," *CAR* 95

*Beaver, W. H., and J. S. Demski, "The Nature of Income Measurement," *The Accounting Review*, Vol. LIV, No. 1, January 1979.

Demski, J., and D. Sappington, "Fully Revealing Income Measurement," *The Accounting Review*, Vol. 65, No. 2, April 1990

Beaver, W. H., and J. S. Demski, "Income Measurement and Valuation," *WP* 1995

Informative Criteria

Marschak, J., and K. Miyasawa, "Economic Comparability of Information systems," *International Economic Review*, vol 9, no 2, Jun 1968, pp.137-74

Holmström, B., "Moral Hazard and Observability," *Bell Journal of Economics* Spring 1979

*Gjesdal, F., "Accounting for Stewardship" *JAR* (Autumn, 1981)

Kim, O., and Y. Suh, "Ranking of accounting information systems for management control." *Journal of Accounting Research* 29 1991 (Autumn): 386-96.

*Kim, S., "Efficiency of an Information System in an Agency Model," *Econometrica* Jan. 1995

Antle, R., and J. Demski. 1988. "The controllability principle in responsibility accounting." *The Accounting Review* 63 (October): 700-18.

(Accounting) Information in Inter-Organization Trades

Hirshleifer, J., "The Private and Social Value of Information and the Reward to Inventive Activity," *AER* 1971

Milgrom, P., and N. Stokey, "Information, Trade and Common Knowledge" JET (1982)

*Antle, R., J. Demski, and S. Ryan, "Multiple sources of Information, Valuation, and Accounting Earnings," Journal of Accounting, Auditing & Finance (1994)

*Demski, J., and G. Feltham, "Market Response to Financial Reports," JAE (Jan. 1994)

Lundholm, R., "Public Signals and the Equilibrium Allocation of Private Information," JAR Aut, 1991

Dye, R., "Earning Management in an Overlapping Generation Model," JAR Autumn 1988

Ryan, S., "A Model of Accrual Measurement with Implications for the Evolution of the Book-to-Market Ratio," JAR, Spring 1995

*Trueman, B., and S. Titman, "An Explanation of Accounting Income Smoothing," Journal of Accounting Research, 1988 vol 26 supp. p.127

Demski, J. "Performance Measurement Manipulation" CAR vol 15 Fall 1998, 261-85.

*Demski, J. and H. Frimor "Performance Measure Garbling under Renegotiation in Multi-period Agencies," JAR 1999 supp.

Christensen, P., J. Demski, and H. Frimor "Auditing in Agencies with Moral Hazard and Renegotiation" 2000 University of Florida WP

Liang, J. "Accounting Recognition and Performance Management," 2000 CMU WP

Information in Intra-Organization Trades: Fundamentals

*Hart, O., and B. Holmström, "The Theory of Contracts," in Bewley, T (ed.), *Advances in Economic Theory*, Cambridge University Press, 1988

Holmström, B., and J. Tirole, "The Theory of the Firm," in *Handbook of Industrial Organization*, Wehmalensee and Willig (eds.), Elsevier, 1989

Holmström, B., and P. Milgrom, "Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design," *Journal of Law, Economics, & Organization* (Fall, 1991)

Holmström, B., and P. Milgrom, "Aggregation and Linerity in the Provision of Intertemporal Incentives," *Econometrica*, vol 55, no 2 Mar 1987, pp.303-28

*Prendergast, C., "The Provision of Incentive in Firms," JEL March 1999

Fudenberg, D., and J. Tirole, "Moral Hazard and Renegotiation in Agency Contracts," *Econometrica*, vol 58, no 6, Nov 1990, pp.1279-319

Hermalin, B., and M. Katz, "Moral Hazard and Verifiability: The Effects of Renegotiation in Agency," *Econometrica* vol 59, no 6, Nov 1991, 1735-53

Information in Intra-Organization Trades: Relative Performance Measures

Holmström, B., "Moral Hazard in Teams," Bell Journal of Economics 1982

*Demski, J., and D., Sappington, "Optimal Incentive Contracts with Multiple Agents," JET June, 1984

Ma, C., J. Moore and S., Turnbull, "Stopping Agents from Cheating," JET, Dec 1988

Glover, J., "A Simpler Mechanism that Stops Agents from Cheating," JET, Feb 1994

*Villadsen, B., "Communication and Delegation in Collusive Agencies," JAE, Mar 1995

Antle, R., and J. Fellingham, "Resource Rationing and Organization Slack in a Two-period Model," JAR, Spring 1990

Information in Intra-Organization Trades: Interactions

*Holmström, B., and P. Milgrom, "Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design," Journal of Law, Economics, & Organization (Fall, 1991)

*Feltham, G., and J. Xie, "Performance Measure Congruity and Diversity in Multi-Task Principal/Agent Relations" AR July 1994 p. 429-53

Arya, A., J. Glover, and K. Sivaramakrishnan, "The Interaction between Decision and Control Problems," AR 1997

Information in Intra-Organization Trades: Accounting Structures

Rajan, M., "Cost Allocation in Multiagent Setting," AR, July 1992

*Holmström, B., and J. Tirole, "Transfer Pricing and Organizational Form," Journal of Law, Economics & Organization (1991)

*Melumad, N., Mookherjee and S. Reichlstein, "A Theory of Responsibility Centers," JAE, (Dec. 1992)

*Antle, R., and J. Demski, "Revenue Recognition," CAR 1989

Arya, A., J. Fellingham, and J. Glover, "Teams, Repeated tasks, and Implicit Incentives," JAE 1997

*Baldenius, T., and S. Reichelstein, "Incentive for Efficient Inventory Management: the role of Historical Cost," 2000 WP.