Carnegie Mellon University Tepper School of Business 47-718 Accounting and Information Economics I

Spring 2006

Instructor: Pierre Jinghong Liang

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Time and Location: Tue and Thu 3:30-5:20pm Room 318.

Office Hours: by appointment

Consulting Textbook: John Christensen and Joel Demski. 2003. Accounting Theory: An Information Content Perspective, New York, NY: McGraw Hill. (ISBN:0-

07-229691-7

Additional Material: Course notes and papers from the reading list.

Course Objective

This course introduces a basic information-economic theme in accounting theory. That is, viewed as a source of information, accounting assumes the economic role of facilitating and influencing decision-making under uncertainty. Alternatively, the two roles of accounting information are labeled *valuation* and *stewardship* respectively. After a broad introduction, we explore two fairly narrowed-defined areas of accounting research which are related to the two roles (or uses). They are: (1) *valuation*: representation of economic value using accounting numbers; (2) *stewardship*: how information is produced and used in team production settings.

Grading:

- Occasional problems sets (from the text or based on papers)
- You will make a few presentations of the assigned papers as either a "pro-" and a "con-."
- Raise questions on papers presented in class
- A take-home final is given during final exam week.

Tentative Reading List

Introduction

- Accounting Theory: An Information Content Perspective Chapter 1
- Feltham, Jerry, 2006. Joel S. Demski: a Leader in Accounting Scholarship, in Essays in Accounting Theory in Honour of Joel S. Demski, Rick Antle, Froystein Gjesdal, and Pierre Jinghong Liang, editors. New York, NY: Springer Publishers.
- Demski, Joel. 2005a. Accounting and Economics, *The New Palgrave Dictionary of Economics*. 2nd Edition
- Ross, Stephen A. 1983. Accounting and Economics, *Accounting Review*, Vol. LVIII, No. 2 (April 1983).
- Demski, Joel. 2005b. Analytic Modeling in Management Accounting Research, The Handbook of Management Accounting Research.

Economic Uses of Accounting Information

- Primary Reading
 - Accounting Theory: An Information Content Perspective Chapters 7-13.
 - Beaver, William H., and Joel S. Demski. 1979. The Nature of Income Measurement. Accounting Review 54 (1):38-46.
 - Demski, Joel S., and David Sappington. 1990. Fully Revealing Income Measurement. *Accounting Review* 65 (2):363-383.
 - Antle, Rick, Joel S. Demski, and Stephen G. Ryan. 1994. Multiple Sources of Information, Valuation and Accounting Earnings. *Journal of Accounting, Auditing & Finance* 9 (4):675-696.
 - Feltham, Gerald, and J. Xie. 1994. Performance Measure Congruity and Diversity in Multi-Task Principal/Agent Relations. Accounting Review 69 (3):429-453.
 - Arya, Anil, Jonathan C. Glover, and K. Sivaramakrishnan. 1997. The Interaction between Decision and Control Problems and the Value of Information. Accounting Review v72 (4):561-74.

• Related Reading

- Butterworth, John E. 1972. The Accounting System as an Information Function. *Journal of Accounting Research* 10:1-27.
- Kanodia, C. 1980. Effects of Shareholder Information on Corporate Decisions and Capital Market Equilibrium. Econometrica 48 (4):923-953.
- Gjesdal, F. 1981. Accounting for Stewardship. Journal of Accounting Research 19:208-231.

Accounting Representation of Firm Value

• Primary Reading

- Accounting Theory: An Information Content Perspective Chapters 4, 9-10.
- Ohlson, James. 1995. Earnings, Book Values, and Dividends in Equity Valuation. Contemporary Accounting Research 11 (2):661-687.
- Feltham, Gerald, and James Ohlson. 1995. Valuation and Clean Surplus Accounting for Operating and Financial Activities. Contemporary Accounting Research 11 (2):689-731.
- Feltham, Gerald A, and James A Ohlson. 1996. Uncertainty Resolution and the Theory of Depreciation Measurement. *Journal of Accounting Re*search 34 (2):209-34.
- Ohlson, James, and Xiao-Jun Zhang. 1998. Accrual Accounting and Equity Valuation. Journal of Accounting Research 36 (Supplement):85-111.
- Ohlson, James. 2005. On Accounting-Based Valuation Formulae. Review of Accounting Studies 10 (2-3):323-347.
- Ohlson, James and Beate E. Juettner-Nauroth. 2005. Expected EPS and EPS Growth as Determinants of Value. Review of Accounting Studies 10 (2-3):349-365.

• Related Reading

- Preinreich, Gabriel A. D. 1937. Valuation and Amortization. Accounting Review 12 (3):209-226.
- Ohlson, James, and Xiao-Jun Zhang. 1999. On the Theory of Forecast Horizon in Equity Valuation. Journal of Accounting Research 37 (2):437-449.
- Zhang, Xiao-Jun. 2000. Conservative Accounting and Equity Valuation. Journal of Accounting and Economics 29:125-149.

Production and Use of Information in Team Settings

• Primary Reading

- Holmstrom, Bengt. 1982. Moral Hazard in Teams. Bell Journal of Economics 13 (2):324-40.
- Rasmusen, E. 1987. Moral Hazard in Risk-Averse Teams. *Rand Journal of Economics* 18 (3):428-435.
- Marino, Anthony M., and Jan Zabojnik. 2004. Internal competition for corporate resources and incentives in teams. Rand Journal of Economics 35 (4):710-727.
- Arya, Anil, John Fellingham, and Jonathan Glover. 1997. Teams, Repeated Tasks, and Implicit Incentives. *Journal of Accounting and Economics* v23 (n1):7-30.
- Liang, P. J., Madhav Rajan, and Korok Ray. 2006. Optimal Team Size and Monitoring in Organizations. Tepper working paper #2006-E1.
- Qian, Yingyi. 1994. Incentives and Loss of Control in an Optimal Hierarchy. Review of Economic Studies 61 (3):527-544.

• Related Reading

- Demski, Joel S. 1973. Rational Choice of Accounting Method for a Class of Partnerships. *Journal of Accounting Research* 11 (2):176-190.
- Calvo, Guillermo A., and Stanislaw Wellisz. 1978. Supervision, Loss of Control, and the Optimal Size of the Firm. *Journal of Political Economy* 86 (5):943-952.
- Legros, Patrick, and Steven A. Matthews. 1993. Efficient and Nearly-Efficient Partnerships. Review of Economic Studies 60 (3):599-611.
- Miller, Nolan. H. 1997. Efficiency in partnerships with joint monitoring.
 Journal of Economic Theory 77 (2):285-299.
- Ziv, Amir. 2000. Information Technology and Optimal Firm Structure.
 Journal of Accounting Research 38 (2):297-328.
- Huddart , Steven J., and P. J. Liang, 2003. Accounting in Partnerships, *American Economic Review: Papers and Proceedings of the Annual Meetings of American Economic Associations*, vol 93 no. 2 (May 2003) p. 410-414.
- Huddart , Steven J., and P. J. Liang, Profit Sharing and Monitoring in Partnerships, *Journal of Accounting and Economics*. vol. 40, No. 1-3, (December 2005) p. 153-187..

47-718 Accounting and Information Economics I Spring 2006 Mini 3 Tentative Schedule

- 1. Tuesday 1/17
 - (a) Organizational Meeting and Introduction (Liang)
 - (b) Reading: Christensen-Demski chapter 1, Feltham 2006, Demski 2005a, Ross 1983

Information-Content Theme

- 2. Thursday 1/19
 - (a) Beaver-Demski 1979 and Demski-Sappington 1990 (Liang)
 - (b) Christensen-Demski Chapter 7
- 3. Tuesday 1/24
 - (a) Antle-Demski-Ryan 1994
 - (b) Christensen-Demski Chapters 8-10
- 4. Thursday 1/26
 - (a) Feltham-Xie 1994
 - (b) Christensen-Demski Chapters 11-13
- 5. Tuesday 1/31
 - (a) Arya-Glover-Sivaramakrishnan 1997
 - (b) Christensen-Demski Chapters 11-13

Accounting Representation of Firm Value

- 6. Thursday 2/2
 - (a) Ohlson 1995 and Feltham-Ohlson 1995 (Liang)
 - (b) Christensen-Demski Chapter 4
- 7. Tuesday 2/7

- (a) Feltham-Ohlson 1996
- (b) Christensen-Demski Chapter 9
- 8. Thursday 2/9: Ohlson-Zhang 1998
- 9. Tuesday 2/14: Ohlson 2005 and Ohlson-Juettner-Nauroth 2005

Information in Team Settings

- 10. Thursday 2/16: Holmstrom 1982 and Rasmusen 1987
- 11. Tuesday 2/21: Marino-Zabojnik 2004
- 12. Thursday 2/23: Arya-Fellingham-Glover 1998
- 13. Tuesday 2/28: Liang-Rajan-Ray 2006
- 14. Thursday 3/2: Qian 1994