

**UNIVERSITY OF WATERLOO**  
**School of Accounting and Finance**

**Empirical archival research in Accounting**

**Contact info:**

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I strongly prefer direct communication, either face-to-face or on the telephone. E-mail can work when you must put something in writing, or when you need to leave a message at an awkward time of day, but I find it a poor vehicle for discussion. Please don't be put off by this, and please do contact me whenever you need help.

**Introduction:**

The major objective of this course is to equip you with skills to engage in empirical archival research. Because a great volume of empirical/archival research in Accounting relates to capital markets, and because that is my particular area of expertise, the course will emphasize that area. Please recognize that the ideas and techniques apply to many settings.

Because the course concerns techniques and methods, we will use "practicum" exercises to allow you to explore data directly. I believe that no amount of abstract learning can substitute for the hands-on experience of real data analysis.

**Course organization and website:**

We will meet weekly on Thursday from 1 to 4 pm in HH 174.

The course site on UW-ACE will contain copies of readings, drop-boxes for assignments, and this syllabus. You will need your UWdir username and password to login.

**Evaluation:**

I will base your course grade on the following:

Weekly oral presentation and class participation	30%
Practicum exercises	40%
Written critique	30%

**Weekly oral presentation and class participation:**

All of us will read all of the assigned material for each class. This provides the background to engage actively and substantively in class discussion. I will evaluate your class participation by judging both your preparation and your willingness to engage in discussion and debate. You cannot demonstrate either of these things with silence.

To understand the assigned papers and to make substantive contributions about them in class, you must read them thoroughly. The following questions provide a starting guide for reading the papers. At a minimum, you should understand:

- (A) What is the motivating question, i.e. the larger issue of broad interest, into which this research fits?
- (B) What is the research question, i.e. the specific question addressed in the study?
- (C) What methods do the authors use to test the hypothesis?
- (D) What sample (time period, industry, country, etc.) do the authors use?
- (E) What are the dependent and independent variables, and how do the authors measure them?
- (F) Have the authors identified potential confounding explanations? If so, what steps have they taken to control or test for the confounding explanations?

Use this set of questions as a starting point. In most cases, if you answer all these questions, you will have a reasonable summary of the paper. For some papers, you may need to adapt, add or delete questions. Use your judgment, and feel free to consult with me.

Because we will all have read all of the papers, I would like to use class time to explore them in detail, rather than summarizing. When you present a paper, assume the audience knows the paper at the level described in (A) – (F) above, and focus on the following:

- (1) Why was the paper assigned? How does it fit with the other readings for this class, and with the class topic?
- (2) Analyze the research design. Does the design suit the theoretical foundation? Identify strengths and weaknesses of the design, relative to alternative designs that could address this research question.
- (3) What have we learned from the paper?
- (4) What questions does the paper leave open for future research?

You should aim for a concise and clear analysis. I will strictly enforce a 10-minute maximum on your presentation, so I advise having an “exit strategy” for making your main points within this limit if you find yourself running short of time.

### **Practicum exercises:**

In this hands-on portion of the course, we will use data to explore some of the methodological issues raised in the readings. Each of you will construct an independent sample of firms to use in the exercises. You may collaborate with one another by sharing techniques or information, although no student may actually do the work for another, and your write-up must be entirely your own work. Please include a cover page on your assignment, with your name, the date, and the assignment number. If you have collaborated with anyone on the assignment, provide an acknowledgment on the cover page that explains with whom you have collaborated and how.

I will evaluate your performance in this portion of the course based on timely and careful completion of the assigned work, on clear and complete descriptions of what you have done and the choices you have made, and on our discussions of the work in class. Generally, work assigned for discussion on a particular Thursday will be due the previous Tuesday evening at 6 pm. This gives me time to have a look at your responses before our class. You should strive to make tables and figures understandable on their own via informative titles, labels and notes; I should not need to read the text of your write-up to understand the illustration.

Empirical archival research involves a lot of choices, and you may not always make the best choices in your first attempt. Archival research also involves plenty of revision, to correct errors and to refine techniques and phrasing as you learn what works and what does not. In keeping with this idea, I will allow you to revise up to two of your practicum assignments after we have discussed them in class, and will count only the later score for your course mark. You may re-submit anytime within two weeks of the day I return the marked assignment to you, but not after that. To submit a revised assignment, use the same dropbox you used for the original assignment, and send me an e-mail to let me know you have resubmitted. Your revision should begin with a brief summary that states clearly what you have changed and why.

### **Written critique:**

You will submit a written critique of a paper that I will choose, taking the role of a referee for a high-quality journal. Hence, you must decide whether the paper provides an interesting and novel contribution to knowledge, and whether the research design appropriately and adequately answers the research question. Propose stronger alternatives where you find weaknesses in the paper’s research design, and explain why your alternatives are stronger.

Your critique must not exceed 5 double-spaced pages, excluding cover page, references, tables and figures. Do not use reduced font size, reduced margins or text-intensive exhibits as means of circumventing the 5-page limit. Instead, edit your writing to make it more concise. If you use tables, figures or exhibits, they must be integral to your critique. Follow the advice above under

“Practicum exercises” about creating clear, understandable figures. I will evaluate you on the quality of your insights and the clarity of your writing, and will give you feedback on both.

You may discuss the paper with other people, but the critique you submit must be entirely your own work. When appropriate, use an acknowledgement footnote on the cover page, as described above under “Practicum exercises”.

### **TURNITIN**

Comments from students on an October 2006 UW survey about academic integrity survey indicated a desire for UW to do more to ensure a 'level playing' field for all students on assignments and examinations. One response to this is the use of Turnitin, electronic screening software, to check assignments prior to their being assessed by faculty. The School of Accounting and Finance has access to Turnitin for the Winter Term 2009, and we will use it for written assignments in this course.

You will submit your assignment to Turnitin through the UW-ACE drop-box, unless you have made an alternative arrangement with me prior to the due date of the assignment. The alternative could include your providing an annotated bibliography for all references used and/or providing an original copy of ALL rough drafts of the assignment, along with the version submitted.

### **Academic offenses, including plagiarism**

Integrity is essential in the academic world. Our successes and failures depend entirely on ideas, analysis and communication – that is, on intellectual property. Intellectual property is difficult to protect, and so the scholarly community depends on the integrity of individual members in acknowledging sources and attributing others’ work appropriately.

If you use another person’s ideas, analysis or wording without proper attribution, then you are committing plagiarism, a very serious academic offense. I have a duty to report such offenses to the dean, and I also feel a strong personal commitment to academic integrity. If I discover a breach, I will prosecute it to the fullest extent available. I expect that at this stage of your academic career you probably have a fairly good sense of what “proper attribution” means, but if you have any doubts at all, please ask me for guidance.

Arts Faculty Council and the University Senate oblige me to add the following:

#### **Academic Integrity:**

**Academic Integrity:** In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility.

**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the

course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline, <http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm>

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4, <http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm>

**Appeals:** A student may appeal the finding and/or penalty in a decision made under Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 - Student Discipline if a ground for an appeal can be established. Read Policy 72 - Student Appeals, <http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm>

**Academic Integrity website (Arts):**

[http://arts.uwaterloo.ca/arts/ugrad/academic\\_responsibility.html](http://arts.uwaterloo.ca/arts/ugrad/academic_responsibility.html)

**Academic Integrity Office (UW):** <http://uwaterloo.ca/academicintegrity/>

**Accommodation for Students with Disabilities:**

Note for students with disabilities: The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.

**Topic Outline**

<b>Week</b>	<b>Date</b>	<b>Topics</b>
1	08-Jan-09	Organization & review
2	15-Jan-09	Overview of capital markets research
3	22-Jan-09	Event study methodology
	29-Jan-09	class re-scheduled
4	05-Feb-09	Returns and earnings
5	12-Feb-09	Risk, return and accounting
6	19-Feb-09	Valuation
	26-Feb-09	class re-scheduled
7	05-Mar-09	Valuation
8	12-Mar-09	Earnings management
9	19-Mar-09	Earnings management
10	26-Mar-09	Conservatism
11	02-Apr-09	Everything's endogenous
12	09-Apr-09	Lessons from my research

## Reading List

### Three general reference books (all on course reserve at Porter Library)

Much of this course focuses on commonly used methodologies in accounting research. These methodologies usually arise in economics and finance. You may therefore find the following two textbooks helpful as general references:

*A Guide to Econometrics* (8<sup>th</sup> ed.) by Peter Kennedy, MIT Press (2008).

*The Econometrics of Financial Markets* by John Y. Campbell, Andrew W. Lo and A. Craig MacKinlay, Princeton University Press (1997).

The following book provides an excellent review of academic literature, particularly empirical archival financial reporting, as it relates to Accounting Theory.

*Financial Accounting Theory* (4<sup>th</sup> ed.) by William R. Scott, Pearson Prentice Hall (2006).

### Week 1 – Review of some research design issues

Kinney, W.R. Jr. “Empirical Accounting Research Design for Ph.D. Students.” *The Accounting Review* 61 (April 1986): 338-350.

### Week 2 – Overview of capital markets research

Gonedes, N.J. and N. Dopuch, “Capital Market Equilibrium, Information Production, and Selecting Accounting Techniques: Theoretical Framework and Review of Empirical Work.” *Journal of Accounting Research* 12 (Supplement 1974): 48-129.

Healy, P.M. and K.G. Palepu, “Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literatures.” *Journal of Accounting and Economics* 31 (2001): 405-440.

Beaver, W.H. “Perspectives on Recent Capital Markets Research.” *The Accounting Review* 77 (April 2002): 453-474.

### Week 3 – Event study methodology

Fama, E.F., L. Fisher, M.C. Jensen and R. Roll. “The Adjustment of Stock Prices to New Information.” *International Economic Review* 10 (February 1969): 1-21.

Brown, S.J. and J.B. Warner. "Using Daily Stock Returns: The Case of Event Studies." *Journal of Financial Economics* 14 (March 1985): 3-31.

MacKinlay, A.C., "Event Studies in Economics and Finance." *Journal of Economic Literature* 35 (March 1997): 13-39.

Healy, P.M. and K.G. Palepu, "Earnings Information Conveyed by Dividend Initiations and Omissions." *Journal of Financial Economics* 21 (1988): 149-175.

#### **Week 4 – Returns and earnings**

Beaver, W.H. "The Information Content of Annual Earnings Announcements." *Journal of Accounting Research* (Selected Studies 1968): 67-100.

Ball, R., and P. Brown. "An Empirical Evaluation of Accounting Income Numbers." *Journal of Accounting Research* 6 (Autumn 1968): 159-178.

Lipe, R. "The Relation Between Stock Returns and Accounting Earnings Given Alternative Information." *The Accounting Review* 65 (January 1990): 49-71.

Collins, D.W. and S.P. Kothari. "An Analysis of Intertemporal and Cross-sectional Determinants of Earnings Response Coefficients." *Journal of Accounting and Economics* 11 (July 1989): 143-181.

Easton, P.D. and T.S. Harris. "Earnings as an Explanatory Variable for Returns." *Journal of Accounting Research* 29 (Spring 1991): 19-36.

#### **Week 5 – Risk, return and accounting**

Fama, E.F. and K.R. French "Common Risk Factors in the Returns on Stocks and Bonds." *Journal of Financial Economics* 33 (1993): 3-56.

Francis, J., R. LaFond, P. Olsson and K. Schipper. "The Market Pricing of Accruals Quality." *Journal of Accounting and Economics* 39 (2005): 295-327.

Abodiy, D., J. Hughes and J. Liu. "Earnings Quality, Insider Trading, and Cost of Capital." *Journal of Accounting Research* 43:5 (December 2005): 651-673.

Core, J.E., W.R. Guay and R. Verdi. "Is Accruals Quality a Priced Risk Factor?" *Journal of Accounting and Economics* 46 (2008): 2-22.



**Week 6 – Valuation: the Feltham-Ohlson model**

Ohlson, J.A. “Earnings, Book Values and Dividends in Securities Valuation.” *Contemporary Accounting Research* 11 (Spring 1995): 661-687.

Feltham, G.A. and J.A. Ohlson. “Valuation and Clean-Surplus Accounting for Operating and Financial Statements.” *Contemporary Accounting Research* 11 (Spring 1995): 689-731.

Bernard, V.L. “The Feltham-Ohlson Framework: Implications for Empiricists.” *Contemporary Accounting Research* 11 (Spring 1995): 733-747.

Lundholm, R. “A Tutorial on the Feltham-Ohlson Framework: Answers to Some Frequently Asked Questions.” *Contemporary Accounting Research* 11 (Spring 1995): 749-761.

**Week 7 – Valuation: applications of the residual income model**

Dechow, P.M., A.P. Hutton and R.G. Sloan. “An Empirical Assessment of the Residual Income Valuation Model.” *Journal of Accounting and Economics* 26 (1999): 1-34.

Lee, C.M.C., J. Myers and B. Swaminathan. “What is the Intrinsic Value of the Dow?” *Journal of Finance* 54 (October 1999): 1693-1741.

Begley, J. and G.A. Feltham. “The Relation between Market Values, Earnings Forecasts, and Reported Earnings.” *Contemporary Accounting Research* 19:1 (2002): 1-48.

Callen, J.L. and D. Segal. “Do Accruals Drive Firm-Level Stock Returns? A Variance Decomposition Analysis.” *Journal of Accounting Research* 42:3 (June 2004): 527-560.

**Week 8 - Earnings management**

Healy, P.M. “The Effect of Bonus Schemes on Accounting Decisions.” *Journal of Accounting and Economics* 7 (1985): 85-107.

Jones, J.J. “Earnings Management During Import Relief Investigations.” *Journal of Accounting Research* 29 (Autumn 1991): 193-228.

Bushee, B.J. “The Influence of Institutional Investors on Myopic R&D Investment Behavior.” *The Accounting Review* 73 (July 1998): 305-334.

Lee, Y-J., K.R. Petroni and M. Shen. "Cherry Picking, Disclosure Quality, and Comprehensive Income Reporting Choices: The Case of Property-Liability Insurers." *Contemporary Accounting Research* 23:3 (Fall 2006): 655-692.

### **Week 9 - Earnings management**

Dechow, P.M., R.G. Sloan and A.P. Sweeney. "Detecting Earnings Management." *The Accounting Review* 70 (1995): 193-225

Kang, S.-H. and K. Sivaramakrishnan. "Issues in Testing Earnings Management and an Instrumental Variable Approach." *Journal of Accounting Research* 33:2 (Autumn 1995): 353-367.

Beneish, M.D. "Detecting GAAP Violation: Implications for Assessing Earnings Management among Firms with Extreme Financial Performance." *Journal of Accounting and Public Policy* 16 (1997): 271-309.

Dechow, P.M. and I.D. Dichev. "The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors." *The Accounting Review* 77 (2002): 35-59.

### **Week 10 - Conservatism**

Basu, S. "The Conservatism Principle and the Asymmetric Timeliness of Earnings." *Journal of Accounting and Economics* 24 (December 1997): 3-37.

Givoly, D. and C. Hayn. "The Changing Time-Series Properties of Earnings, Cash Flows and Accruals: Has Financial Reporting Become More Conservative?" *Journal of Accounting and Economics* 29 (June 2000): 287-320.

Penman, S.H. and X.-J. Zhang. "Accounting Conservatism, the Quality of Earnings, and Stock Returns." *The Accounting Review* 77:2 (April 2002): 237-263.

Dietrich, J.R., K.A. Muller and E.J. Riedl. "Asymmetric Timeliness Tests of Accounting Conservatism." working paper Ohio State U., Penn State U. and Harvard Business School (September 2006).

**Week 11 – Everything’s endogenous**

O’Brien, P.C. and R. Bhushan. “Analyst Following and Institutional Ownership.” *Journal of Accounting Research* 28 (Supplement 1990): 55-76.

Leuz, C. and R.E. Verrecchia. “The Economic Consequences of Increased Disclosure.” *Journal of Accounting Research* 38 (Supplement 2000): 91-124.

Larcker, D.F. and T.O. Rusticus. “On the Use of Instrumental Variables in Accounting Research.” (May 2008) working paper, Stanford U. and Northwestern U.

Armstrong, C., A.D. Jagolinzer and D.F. Larcker. “Chief Executive Officer Equity Incentives and Accounting Irregularities.” (May 2008) working paper no. 4, Rock Center for Corporate Governance, Stanford U.

**Week 12 – Lessons from my research**

O’Brien, P.C. “Analysts' Forecasts as Earnings Expectations.” *Journal of Accounting and Economics* 10 (1988): 53-83.

O’Brien, P.C. “Corporate Earnings and the Macroeconomy.” (1994) working paper.

McNichols, M.F. and P.C. O’Brien, “Self-selection and Analyst Coverage.” *Journal of Accounting Research* 35 (Supplement 1997): 167-199.