



**A771**  
**Seminar in Research Methods & Designs**  
**in Empirical-archival Financial Accounting Research**  
**Summer 2019**

**INSTRUCTOR AND CONTACT INFORMATION**

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Office Hours: One hour after class or by appointment

Classroom: **DSB A102 – Tuesday: 11:00 am – 2:00 pm.**

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**COURSE OBJECTIVES**

This course is designed to introduce you the basic research methods and designs that are requisite to good empirical research in the field of archival financial accounting.

Good research tries to answer interesting questions, enlightened by theoretical reasoning, adding contribution to previous empirical findings, and following well-established and sound methodology and valid research design.

The course materials are intended to ask big-picture questions about the role of financial reporting on firm valuation and on investors decision-making behavior. There is no attempt to cover all major areas of archival financial accounting research; that is simply not possible.

By completing the course material, you should be able to identify interesting research questions, formulate testable hypotheses, and empirically test these hypotheses using valid and powerful research designs and appropriate statistical methods.

**COURSE MATERIALS AND READINGS**

The course readings will consist of book chapters, published papers, and working papers. There are two sets of reading assignment in each topic:

1. Background papers (mainly literature reviews)
2. Seminal and/or recent empirical papers.

Please note that some of the assigned papers may involve complex analytical modeling & mathematical derivations to drive theoretical concepts. In this seminar, we focus **ONLY** on the intuition of the analysis and how we can implement the related concepts in the empirical research.

## **CLASS FORMAT**

The course is structured in a seminar format. Every student is expected to thoroughly read **all** the assigned readings before class and to fully participate in the in-class discussion. Your participation in discussions will be assessed based on the *quality* of comments, questions, and ideas, and not simply on the quantity of comments.

Starting with for fourth week, one student will be assigned to present one of the required papers. This student should prepare and distribute a written summary of the paper (maximum 2 pages), and lead the in-class discussion. The written summary and the in-class discussion should focus on the following questions:

### **Part 1: Research question and motivation:**

- What is the research question?
- Why is it important? Who cares, and why?
- How do the research questions add to the literature?

### **Part 2: Theory and research hypotheses:**

- What are the research hypotheses?
- Do the hypotheses follow the theory?
- Are there credible null hypotheses?
- Are there any competing hypotheses?

### **Part 3: Research method & Design:**

- How did the authors select their sample?
- What are the implications of the sample selection criteria?
- What is the basic research design? Is the design appropriate?
- Does the empirical model correctly specified?
- Do the empirical proxy measures capture their underlying theoretical constructs?
- What empirical models are estimated?
- Are there omitted variables?

### **Part 4: Interpretation of the results**

- What are the key findings? Are the findings economically meaningful?
- Are the results interpreted appropriately? Do the results answer the questions?

## **EVALUATION**

Your grade is based on the following components:

Class discussion: <i>participation</i> (10%) & <i>presentations</i> (15%)	25%
Replication (Group of two). Reports are due in the last day of class	25%
Research Proposal	<u>50%</u>
Total	100%

**REPLICATION: (GROUP ASSIGNMENT)**

You are required to complete an updated replication of a prior published study as part of the course requirement. The replicated study must be approved in advance. The write-up should include

- (a) the replicated study's motivation and background,
- (b) the research question/hypothesis investigated,
- (c) a description of the data/sample and method of analysis (research design), and
- (d) your results as compared with the originally replicated study with explanation of similarities and differences in the results.

The replication involves extracting data from databases commonly used in archival research (e.g., COMPUSTAT, CRSP, I/B/E/S) and using a statistical package such SAS to analyze the data.

**RESEARCH PROPOSAL:**

Each student will select a topic of interest and will prepare a research proposal. Good research proposal tries to answer interesting questions, enlightened by theoretical reasoning, and applying well-established and sound research method & design. Your proposal will be assessed against each of the sub-headings outlined below.

1. Define clearly your **research problem** and provide justifications for why it is an interesting research question (i.e., motivation).
2. Critically **review** the previous studies that have addressed the research question and identify your contribution to the existing literature.
3. Develop the **theoretical structure**, from which you develop the specific hypotheses to be tested. In the absence of persuasive theoretical structure on which you build *causal links*, the results cannot be used to make inferences about the effect of one variable on another.
4. Develop the research **design** and research **method**.  
Research design provides a plan and structure that enable the researcher to answer the research questions as *validly*, as *objectively* and as *accurately* as possible. Therefore, the first and perhaps most important step is to carefully define what questions are to be answered, and specifically, to identify the particular factor or variable we want to understand (i.e., the dependent variable)
  - a. Operationalize the theoretical constructs and discuss the causal links in a structural model:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \dots + \beta_k X_{ki} + \epsilon_i$$

- b. Explain how each variable in the model is measured (Construct Validity).
- c. State how you will control for confounding factors, if any (Internal Validity)
- d. Explain the method of collecting data and type of research design you employ (Cross Sectional, Time-Series, or Panel Data).
- e. State the statistical techniques (univariate, multivariate, etc.) and type of analysis.

### **GRADE CONVERSION**

At the end of the course your overall percentage grade will be converted to your letter grade in accordance with the following conversion scheme.

LETTER GRADE	PERCENT
A+	90 - 100
A	85 - 89
A-	80 - 84
B+	77 - 79
B	73 - 76
B-	70 - 72
F	00 - 69

### **ACADEMIC DISHONESTY**

It is the student's responsibility to understand what constitutes academic dishonesty. Please refer to the University Senate Academic Integrity Policy at the following URL:

<http://www.mcmaster.ca/univsec/policy/AcademicIntegrity.pdf>

This policy describes the responsibilities, procedures, and guidelines for students and faculty should a case of academic dishonesty arise. Academic dishonesty is defined as to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. Please refer to the policy for a list of examples. The policy also provides faculty with procedures to follow in cases of academic dishonesty as well as general guidelines for penalties. For further information related to the policy, please refer to the Office of Academic Integrity at:

<http://www.mcmaster.ca/academicintegrity>

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<http://library.mcmaster.ca/about/copying.pdf>

**MAJOR TOPICS**

1. Introduction to research design and methods in empirical accounting research.
  - (i) Identify Interesting Research Questions and the Relevant Supportive Theory that help you formulate the research hypotheses.
  - (ii) Model the hypothesized Causal links, develop empirical proxy measures capture their underlying theoretical constructs & identify and remove the endogeneity problems.
  - (iii) Describe the research design and methodology.
2. Event Study Methodology.
  - a. Earnings Announcements.
  - b. Non-earnings Announcements (e.g., stock split, dividend announcements, merger & acquisition, etc.)
  - c. Market Efficiency & Post Earnings Announcement Drift (PEAD).
3. Earnings response coefficients (ERC).
4. Value Relevance of accounting information.
5. Economic consequences of mandatory accounting changes.
6. Accounting choices & Earnings Management.
7. International accounting research.

**Class Schedule (Dates & Time)**

Session	Date	Class Time	Remarks
1	Tuesday, May 14	11:00am - 2:00pm	Identify Research Questions & Supportive Theory
2	Tuesday, May 21	11:00am - 2:00pm	Model Causal Links & Detect Endogeneity Problems
3	Tuesday, May 28	11:00am - 2:00pm	The Basics of Event Study Research Methodology
4*	Tuesday, June 4	11:00am – 2:00pm	First Session of Student Presentations (See below)
5	Tuesday, June 11	<b>10:30am – 1:30pm</b>	Papers will be selected and assigned one week ahead.
6	Tuesday, June 18	<b>3:30pm – 6:30pm</b>	
7	Tuesday, June 25	<b>12:00pm – 3:00pm</b>	Guest Speaker?!
8	Tuesday, July 2	11:00am - 2:00pm	
9	Tuesday, July 9	2:30pm - 5:30pm	
10	Tuesday, July 16	11:00am - 2:00pm	
11	Tuesday, July 23	11:00am - 2:00pm	
12	Tuesday, July 30	11:00am - 2:00pm	
13	Tuesday, August 6	11:00am - 2:00pm	Proposal Presentations?!

**\* Reading List for session 4 (Event Study Methodology)**

- Ball, R., Brown, P. (1968): An Empirical Evaluation of Accounting Income Numbers. *Journal of Accounting Research*, 6, 159-178. (Billy)
- Beaver, W. H., “The Information Content of Annual Earnings Announcements,” Supplement to *The Journal of Accounting Research* (1968), pp. 67-92. (Mei)
- Fama, E. F., Fisher, L., Jensen, C. M., Roll, R., “The Adjustment of Stock Prices to New Information”, *International Economic Review*, 10, No. 1 (1969), pp. 1-21. (Wenting)

**Reading List for the First 3 Weeks**  
**Foundation of Empirical Archival Accounting Research**

Please note that I will lecture the first three classes. Your presentations will start with the fourth week. Following are background materials to the first three classes.

**The Process of Conducting & Evaluating Empirical Accounting Research:**

- Kinney, W. 1986. Empirical accounting research design for Ph.D. students. *Accounting Review* 61 (April): 338-350.
- Gordon, Teresa P. and Jason C. Porter. 2009. Reading and Understanding Academic Research in Accounting: A Guide for Students, *Global Perspectives on Accounting Education*, Volume 6: 25-45.

**The Role of Agency Theory & Positive Accounting Theory in Empirical Accounting Research**

- Jensen, Michael C. and William H. Meckling, 1976, Theory of the firm: Managerial behavior, agency costs and ownership structure, *Journal of Financial Economics* 3.
- Akerlof, G., 1970. The market for ‘lemons’: quality uncertainty and the market mechanism. *Quarterly Journal of Economics* 90, 629–650.
- Watts, Ross and Jerold Zimmerman, 1978. Towards a positive theory of the determination of accounting standards. *The Accounting Review* 53,112-134.

**Causal Inference in Empirical Archival Accounting Research**

- Gow, I., D. Larcker, and Reiss, 2016. Causal Inference in Accounting Research, *Journal of Accounting Research*. (Sections 1-3)

**The Role of Financial Reporting in Capital Markets**

- Leuz, C. and P. Wysocki, 2016, The Economics of Disclosure and Financial Reporting Regulation: U.S. and International Evidence and Suggestions for Future Research, *Journal of Accounting Research*. (Sections 1 and 2)
- Healy, Paul M. and Krishna G. Palepu, 2001. Information Asymmetry, Corporate Disclosure, And The Capital Markets: A Review Of The Empirical Disclosure Literature, *Journal of Accounting and Economics* 31, 405-440 (Sections 1 and 2)
- Armstrong, C. S., Wayne R. Guay, and Joseph P. Weber, 2010. The role of financial reporting in corporate governance and debt contracting, *Journal of Accounting and Economics*: 179-234. (Sections 1 and 2)

**Event Study Methodology and Capital Market Based Research**

- MacKinlay, A. C. 1997. Event studies in Economics and Finance. *Journal of Economic Literature*. 35, 13-39.
- Kothari, S.P., 2001, Capital Markets Research in Accounting, *Journal of Accounting & Economics* 31, 105-231. (Sections 1 and 2).