



Tuck School at Dartmouth

**RESEARCH TO PRACTICE SEMINAR**

**CORPORATE TAKEOVERS: MODERN EMPIRICAL DEVELOPMENTS**

Winter 2013  
Mon/Tue 3:00-4:30

**B. ESPEN ECKBO**

Tuck Centennial Professor of Finance and  
Founding Director, Lindenauer Center for Corporate Governance  
201 Woodbury Hall  
(603) 646-3953  
[b.espen.eckbo@dartmouth.edu](mailto:b.espen.eckbo@dartmouth.edu)  
[www.tuck.dartmouth.edu/eckbo](http://www.tuck.dartmouth.edu/eckbo)

**KATI LEBRUN**

Academic Coordinator  
203 Woodbury  
(603) 646-3412  
[Kati.L.LeBrun@dartmouth.edu](mailto:Kati.L.LeBrun@dartmouth.edu)

**DESCRIPTION**

In this research to practice seminar, we discuss the results of recent large-scale empirical investigations into the economic effects of corporate takeovers. We focus exclusively on empirical studies in financial economics (as opposed to in the areas of strategy or organizational behavior). The research papers address questions such as: how large are stockholder gains from takeovers and what are the sources of these gains; what are optimal bid strategies and does deal financing matter; do defensive tactics such as poison pills affect takeover premiums; how do large institutional target shareholders affect deal outcomes; how do takeovers impact CEO and director careers; and how does merger arbitrage work. The course develops the basic empirical methodologies required to understand the course readings. Intense student involvement in both the presentation and class discussion of the scientific papers is required.

**GRADING**

- 60% of the grade based on following three parts:
  - Individual participation in discussions of the readings
  - Presentations of two assigned class readings over the term
  - Individual (two-page) memorandums on specific questions
- 40% of the grade: Group term paper to be presented to class in the last week of the term

**READINGS:**

These two volumes contain almost all the original articles discussed in class and must be purchased for the course (low price: only about \$80 for the two-volume 1,900 page set): ISBN-13: 978-0-12-382016-7

Eckbo, B. Espen (ed.), 2010, *Corporate Takeovers: Modern Empirical Developments. Volume 1: Valuation Estimates and Takeover Activity*, (Elsevier/Academic Press). (Referred to below as E1).

Eckbo, B. Espen (ed.), 2010, *Corporate Takeovers: Modern Empirical Developments. Volume 2: Bidding Strategies, Financing, and Corporate Control*, (Elsevier/Academic Press) (Referred to below as E2)

## CORPORATE TAKEOVERS: MODERN EMPIRICAL DEVELOPMENTS

### STUDENT WRITE-UPS AND PRESENTATIONS

#### I. Individual Two-page memos

Each student submits electronically to Professor Eckbo (email to academic course coordinator Kati LeBrun at [kati.lebrun@tuck.dartmouth.edu](mailto:kati.lebrun@tuck.dartmouth.edu)) a total of three two-page memos answering the sets of questions listed below in this outline. Each memo is due at the beginning of each designated class. The memos will not be graded. Their purpose is to enhance the level of class preparedness and class discussion.

#### II. Group Paper Presentations

Students work in groups of two. Each group will present to class two assigned research papers over the term. Prepare a 45-minute power point presentation (summary of the paper).

#### III. III. Group Term Paper

##### *(1) Timeline and format*

The term paper is due for presentation to class in Sessions 17 and 18. You need to submit electronically to Professor Eckbo a paper of maximum 10 double-spaced pages (plus tables and references) as well as a power point presentation of the main results and conclusions.

You will be given about 30 minutes to present your results to the class during the last week of the term.

##### *(2) Objective*

The objective of the term paper is to describe and analyze a case which you think raises interesting issues concerning corporate takeovers or restructurings in some part of the world. You are free to select the topic and emphasis. If you are familiar with or interested in a country other than the U.S., you are encouraged to present a case from your own region and culture.

##### *(3) Literature*

Include a brief summary of one or more academic study that you think is relevant for the case, either directly or as background. If you cannot find a suitable academic paper in the syllabus, consult with Professor Eckbo. Note that if you are dealing with a foreign country, you should include a brief description of key aspects of the country's financial and governance systems as these may not be widely known to the class.

A proposal for the term paper should be emailed to Professor Eckbo by Session 11 (Feb 11).

**CORPORATE TAKEOVERS: MODERN EMPIRICAL DEVELOPMENTS - SPRING 2012**  
**B. Espen Eckbo**

<u>SESSION #</u>	<u>DATE</u>	<u>TOPIC</u>	<u>MEMO DUE</u>
<b>I. INTRODUCTION</b>			
1	Mon	1/7 Takeover Research Methodology	
<b>II. TAKEOVER LAW</b>			
2	Tue	1/8 Takeover Law and Contracting	
3	Mon	1/14 Conflicts of Interests in Minority Buyouts	
4	Tue	1/15 Defensive Measures: The Poison Pill Controversy	Memo 1
<b>III. MERGERS AND INDUSTRY COMPETITION</b>			
5	Tue*	1/22 What Drives Merger Waves ?	
6	Wed*	1/23 Merger, Competition and Antitrust	Memo 2
7	Mon	1/28 Why are Bidder Takeover Gains so Small?	
<b>IV. TAKEOVER BIDDING STRATEGIES</b>			
8	Tue	1/29 A Primer on Auction Bidding	
9	Mon	2/4 The Toehold Puzzle	
10	Tue	2/5 The Markup Pricing Puzzle	
11	Mon	2/11 Targets in Bankruptcy	
12	Tue	2/12 Financing Takeovers	
<b>V. MERGER ARBITRAGE AND INCENTIVES</b>			
13	Mon	2/18 Returns to Merger Arbitrage	Memo 3
14	Tue	2/19 Effects of Mergers on Executives	
15	Mon	2/25 How do Large Shareholder Vote in Mergers?	
16	Tue	2/26 Corporate Restructurings	
17	Mon	3/4 Term project presentations	
18	Tue	3/5 Term project presentations	

## READINGS FOR CORPORATE TAKEOVERS: MODERN EMPIRICAL DEVELOPMENTS

All but two of the references below are all found in the two reprint volumes listed above. All references are to be read by all students, regardless of whether a group is presenting or not.

### I. INTRODUCTION

#### SESSION 1: Takeover research methodology

- *Event studies and market efficiency*
- *Cross-section of expected returns*
- *Performance analysis*

E1 – Ch 2: Khotari and Warner, “Econometrics of Event Studies”

### II. TAKEOVER LAW

#### SESSION 2: Takeover Law and Contracting

- *Contracts protecting takeover negotiations*
- *Director fiduciary duties during the takeover process*
- *Legal basis for takeover defenses*

E1 – Ch 1: Betton, Eckbo and Thorburn “Corporate Takeovers”, Section 2.3

#### SESSION 3: Conflicts of Interest in Minority Buyouts

- *Rules governing minority buyouts*
- *Offer premiums in buyouts*
- *Corporate valuation issues*

Bates, Thomas W., Michael L. Lemmon, and James S. Linck, 2006, “Shareholder Wealth Effects and Bid Negotiation in Freeze-out deals: Are Minority Shareholders Left out in the Cold?”, *Journal of Financial Economics* 81, 681–708

#### SESSION 4: Defensive Measures: The Poison Pill Controversy

- *Cross-sectional determinants of offer premiums*
- *Effects of poison pills on offer premiums*
- *The Circon pill*

E1 – Ch 1: Betton, Eckbo and Thorburn, “Corporate Takeovers”, Section 3.5  
Circon Case: HBS 9-801-403 (A)

#### Student presentation:

##### **Group 1:**

E2 – Ch 12: Comment and Schwert, “Poison or Placebo? Evidence on the Deterrence and Wealth effects of Modern Anti-Takeover Measures”

**Group 2:**

E2 – Ch 13: Bates, Becher and Lemmon, "Board Classification and Managerial Entrenchment: Evidence from the Market for Corporate Control".

Memo #1 due

**III. MERGERS AND INDUSTRY COMPETITION**

**SESSION 5: What Drives Merger Waves?**

- *Historical mergers waves*
- *Classical motives for mergers*
- *Are mergers stock market driven?*

E1 – Ch 1 – Sections 2.1, 2.2

Student Presentation:

**Group 3:**

E1 – Ch 5: Rhodes-Kropf, Robinson and Viswanathan, "Valuation Waves and Merger Activity: The Empirical Evidence"

**Group 4:**

E1 – Ch 6: Harford, "What Drives Merger Waves?"

**SESSION 6: Merger, Competition and Antitrust**

- *Potential effects of merger on industry competition*
- *Antitrust policy towards horizontal merger*
- *Empirical tests for anticompetitive effects of merger*

E1 – Ch 1: Betton, Eckbo and Thorburn, "Corporate takeovers", Section 6

E1 – Ch 12: Eckbo, "Horizontal Mergers, Collusion, and Stockholder Wealth"

E1 – Ch 13: Fee and Thomas, "Sources of Gains in Horizontal Mergers: Evidence from Customers, Supplier, and Rival Firms"

Memo #2 due

**SESSION 7: Why are Bidder Takeover Gains so Small?**

- *Econometrics of bidder announcement returns*
- *The curious size anomaly*
- *Private versus public status of bidders and targets*

E1 – Ch 1: Betton, Eckbo and Thorburn, "Corporate Takeovers", Section 4 (except 4.5), 5.1

E1 – Ch 7: Moeller, Schlingemann and Stulz, "Firm Size and the Gains from Acquisitions"

E1 – Ch 8: Barger, Schlingemann, Stulz and Zutter, "Why do Private Acquirers Pay so Little Compared to Public Acquirers"

**IV. TAKEOVER BIDDING STRATEGIES**

### **SESSION 8: A Primer on Auctions Bidding**

- *Types of auctions*
- *Auction analogy for takeovers*
- *Optimal bidding strategies*

E1 – Ch 1: Betton, Eckbo and Thorburn, “Corporate Takeovers”, Section 3.1

For a thorough mathematical exposition of auction bidding, see E2 – Ch2: “Auctions in Corporate Finance”

Memo #3 due

### **SESSION 9: The Toehold Puzzle**

- *Costs and Benefits of Toeholds*
- *The Disappearing Toehold Phenomenon*
- *The Toehold Threshold Model*

E1 – Ch 1: Betton, Eckbo and Thorburn, “Corporate Takeovers”, Section 3.1.1, 3.3

E2 – Ch 4: Betton, Eckbo and Thorburn, “Merger negotiations and the Toehold Puzzle”

### **SESSION 10: The Markup Pricing Puzzle**

- *Market pricing implications of deal anticipation*
- *Are target stock price runups costly?*
- *Resolution of the puzzle*

Betton, Sandra, B. Espen Eckbo, Karin S. Thorburn and Rex Thompson, 2012, “Merger Negotiations with Stock Market Feedback”, Working Paper, Tuck School of Business.

### **SESSION 11: Targets in Bankruptcy**

- *What’s unique about distressed targets?*
- *Targets in Chapter 11*
- *Do “fire-sales” exist?*

E1 – Ch 1: Betton, Eckbo and Thorburn, “Corporate Takeovers”, Section 3.6

E2 – Ch 9: Eckbo and Thorburn, “Automatic Bankruptcy Auctions and Fire-Sales”

Student presentation:

### **Group 5:**

E2 – Ch 7: Hotchkiss and Mooradian, “Acquisitions as a Means of Restructuring Firms in Chapter 11”

### **SESSION 12: Financing Takeovers**

- *Alternative theories for why financing matters*
- *Adverse selection in equity issues*
- *Effect on bidder gains of the financing choice*

E1 – Ch1: Betton, Eckbo and Thorburn, “Corporate Takeovers”, Section 3.2

Student Presentation:

**Group 1:**

E2 – Ch 18. Schlingemann, “Financing Decisions and Bidder Gains”

**V. MERGER ARBITRAGE AND INCENTIVES**

**SESSION 13: Returns to Merger Arbitrage**

- *Merger arbitrage techniques*
- *Merger outcome probabilities*
- *Returns to merger arbitrage*

E1 – Ch 1: Betton, Eckbo and Thorburn, “Corporate Takeovers”, Section 5.3

Case: General Electric’s Proposed Acquisition of Honeywell (Darden case # UV1391)  
Spreadsheet UVA-S-F-1493.xls

Student Presentation:

**Group 2:**

E2 – Ch 26: Hsieh and Walking, “Determinants and Implications of Arbitrage Holdings in Acquisitions”

**SESSION 14: Effects of Mergers on Executives**

- *Optimal compensation programs*
- *Entrenchment and target CEO bargaining*
- *Conflicts of interests and offer premiums*

E1 – Ch 1: Betton, Eckbo and Thorburn, “Corporate Takeovers”, Section 5.2

Student Presentation:

**Group 3:**

E2 – Ch 20: Grinstein and Hribar, “CEO Compensation and Incentives: Evidence from M&A Bonuses”

**Group 4:**

E2 – Ch 21: Harford, “Takeover Bids and Target Directors’ Incentives: Retention, Experience, and Settling Up”

**SESSION 15: How do Large Shareholder Vote in Mergers?**

- *The role of voting in the governance system*
- *Cross-border impediments to voting*
- *Role of large shareholder voting*

Student Presentation:

**Group 5:**

E2 – Ch 15: Matvosr and Ostrovsky, “Cross-Ownership, Returns, and Voting in Mergers”

**SESSION 16: Financial Restructurings**

- *Types and frequency of financial restructurings*
- *What are restructurings trying to accomplish*
- *What are the value consequences of restructurings?*

E2 – 17: Ch Eckbo and Thorburn, “Corporate Restructuring: Breakups and LBOs”

**SESSIONS 17 and 18: Term paper presentations**





Tuck School at Dartmouth

**CORPORATE TAKEOVERS**

**RESEARCH TO PRACTICE SEMINAR**

Winter 2013

**I. STUDENT GROUPS**

**Group 1**

Yoel Kifle  
Francis Lee

**Group 2**

Robert Hillas  
Maximilien Lefranc

**Group 3**

Charles Culp  
Jay Beckstoffer

**Group 4**

Dan Esdorn  
Yamini Jagannadhan

**Group 5**

Luis Blanco  
Shiv Kak

## **II. GROUP PRESENTATIONS (2 PER GROUP OVER THE TERM PLUS TERM PAPER)**

### **TUESDAY 1/15: DEFENSIVE MEASURES (SESSION 3)**

#### Group 1:

E2 – Ch 12: Comment and Schwert, “Poison or Placebo? Evidence on the Deterrence and Wealth effects of Modern Anti-Takeover Measures”

#### Group 2:

E2 – Ch 13: Bates, Becher and Lemmon, "Board Classification and Managerial Entrenchment: Evidence from the Market for Corporate Control".

### **TUESDAY 1/22: MERGER WAVES (SESSION 5)**

#### Group 3:

E1 – Ch 5: Rhodes-Kropf, Robinson and Viswanathan, “Valuation Waves and Merger Activity: The Empirical Evidence,”

#### Group 4:

E1 – Ch 6: Harford, “What Drives Merger Waves?”

### **MONDAY 2/11: TARGETS IN BANKRUPTCY (SESSION 11)**

#### Group 5:

E2 – Ch 7: Hotchkiss and Mooradian, “Acquisitions as a Means of Restructuring Firms in Chapter 11”

### **TUESDAY 2/12: FINANCING TAKEOVERS (SESSION 12)**

#### Group 1:

E2 – Ch 18: Schlingemann, Financing Decisions and Bidder gains”.

### **MONDAY 2/18: RETURNS TO MERGER ARBITRAGE (SESSION 13)**

#### Group 2:

E2 – Ch 26: Hsieh and Walking, “Determinants and Implications of Arbitrage Holdings in Acquisitions”

### **TUESDAY 2/19: MERGERS AND EXECUTIVE COMPENSATION (SESSION 14)**

#### Group 3:

E2 – Ch 20: Grinstein and Hribar, “CEO Compensation and Incentives: Evidence from M&A Bonuses”

#### Group 4:

E2 – Ch 21: Harford, “Takeover Bids and Target Directors’ Incentives: Retention, Experience, and Settling Up”

### **MONDAY 2/25: SHAREHOLDER VOTING (SESSION 15)**

#### Group 5:

E2 – Ch 15: Matvosr and Ostrovsky, “Cross-Ownership, Returns, and Voting in Mergers”

### **MONDAY 3/4 AND TUESDAY 2/5 : TERM PAPER PRESENTATIONS (SESSION 17 AND 18)**

All groups



**Tuck School at Dartmouth**

**RTP: CORPORATE TAKEOVERS**

**Winter 2013**

**Professor B. Espen Eckbo**

**Two-Page Memo #1:**

**Due Monday 1/14, Session 3: Defensive Measures: The Poison Pill Controversy**

**Readings:**

E1 – Ch1: Betton, Eckbo and Thorburn, “Corporate Takeovers”, Section 3.5

E2 – Ch12: Comment and Schwert, “Poison or Placebo? Evidence on the Deterrence and Wealth effects of Modern Anti-Takeover Measures”

E2 – Ch 13: Bates, Becher and Lemmon, "Board Classification and Managerial Entrenchment: Evidence from the Market for Corporate Control".

Circon Case: HBS 9-801-403 (A)

**Questions:**

- (1) Define “hostility” and “resistance” in the context of takeover bids. Who bears the resistance costs? Is target resistance necessarily a violation of the board’s fiduciary obligation to target shareholders? Why or why not?
- (2) In the Circon case, suppose US Surgical had acquired 15% of the target shares and thus triggered Circon’s poison pill (this, of course, did not happen in reality). Calculate the following:
  - a. The dollar value of the offer premium offer by Surgical for 100% of Circon’s shares, relative to Circon’s pre-bid market price of \$10.45.
  - b. The maximum wealth transfer from the Surgical to Circon’s other shareholders from triggering the pill.
  - c. The amount of cash Circon’s shareholders would have to pay to exercise the rightsAs a shareholder of Circon, how would you have reacted to a decision by Circon’s board to exercise the pill?
- (3) Schwert and Comment (and others afterwards) fail to find a significant difference between offer premiums in takeovers where the target has in place a poison pill and takeovers where the target does not have a pill in place. Does this mean that poison pills are not effective.
- (4) Briefly characterize the main conclusion in Bates, Becher and Lemmon. Do you find their conclusion surprising?



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**RTP: CORPORATE TAKEOVERS**

**Winter 2013**

**Professor B. Espen Eckbo**

**Two-Page Memo #2:**

**Due Wednesday 1/23, Session 6: Merger, Competition and Antitrust**

**Readings:**

E1 – Ch1, Section 6 “Takeovers, Competition and Antitrust”

E1 – Ch 12: Eckbo, “Horizontal Mergers, Collusion, and Stockholder Wealth”

**Questions:**

- (1) Suppose two firms in the same industry are proposing to merge. If the industry is highly concentrated, do you believe the merger may have anticompetitive effects? Why or why not?
- (2) Outline how you might use announcement returns to rivals of the two merging firms to test whether the merger will have collusive anticompetitive effects. What is the alternative hypothesis?
- (3) You are working at the Department of Justice as an antitrust economist and consultant. How would you propose to implement the test methodology under (2) to assist you in identifying truly anticompetitive mergers?



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**RTP: CORPORATE TAKEOVERS**

**Winter 2013**

**Professor B. Espen Eckbo**

**Two-Page Memo #3:**

**Due Monday 2/18, Session 13: Returns to Merger Arbitrage**

**Readings:**

E1 – Ch 1: Betton, Eckbo and Thorburn, “Corporate Takeovers”, Section 5.3

E2 – Ch 26: Hsieh and Walking, “Determinants and Implications of Arbitrage Holdings in Acquisitions”

Handout: General Electric’s Proposed Acquisition of Honeywell (Darden case # UV1391)

Spreadsheet UVA-S-F-1493.xls

**Questions (for the GE-Honeywell case):**

- (1) Explain Jessica Gallinelli’s arbitrage position. What is she trying to accomplish?
- (2) What is the return on Gallinelli’s position to date?
- (3) How did the European Commission’s announcement likely change investors’ outlook on the chances of deal consummation?
- (4) What should Gallinelli do in response to the announcement?

**General question (for groups other than group 2 who presents the paper in ch. 26):**

- (5) Are merger arbitrage positions risk-free?
- (6) What is the average annualized return to merger arbitrage activity, and what determines this return?