

THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
Joseph M. Bryan School of Business and Economics
Department of Accounting and Finance
Fall 2009

I. Meeting Time and Place

FIN 625.51, Corporate Strategy and the Finance Function
2:00 pm – 4:45 pm M, Bryan School (Room 205 Bryan Bldg.)¹

II. Instructor

Daniel T. Winkler
Office: 324 Bryan Bldg.
Phone: (336) 256-0122
E-mail: dt_winkler@uncg.edu (best way to contact me)
Blackboard: <http://blackboard.uncg.edu>
Office Hours: 1:00 – 2:00 pm TR or by appointment; 5:15 - 6:15 pm T (starting Oct. 20)

III. Prerequisites

Prerequisites: MBA 605, 617; Co-requisite is MBA 620

IV. Course Materials

Douglas R. Emery, John D. Finnerty, and John D. Stowe. *Corporate Financial Management*, 3rd Ed., Prentice Hall Publishing (Pearson), 2007. ISBN: 9780132278720.

Harvard Business Review Cases (HC) purchased and downloaded online at:
http://harvardbusinessonline.hbsp.harvard.edu/b02/en/cases/cases_home.jhtml. Case ordering numbers are given in parentheses next to each case in the Tentative Schedule.

Darden Business Case Studies purchased and downloaded online at:
<https://store.darden.virginia.edu/>. Case ordering numbers are given in parentheses next to each case in the Tentative Schedule.

HP (Hewlett Packard) 10 B II, 17BII financial calculator or the equivalent.

V. Course Description and Purpose

The UNCG Graduate Bulletin describes MBA 625 as follows:

"Finance in the strategic management process; corporate strategies and shareholder value creation, financing decisions, distribution policy, and long-term investment decisions."

¹ Note that due to the Labor Day holiday, the class normally scheduled for Monday, September 7th will meet on Friday, September 11th at 2:00 pm – 4:45 pm in 205 Bryan.

The learning outcomes from this course are as follows:

1. Recognize the role played by the finance function in developing a global strategic plan.
2. Evaluate the extent to which a firm's investment, financing, and dividend decisions contribute to creating value for its common shareholders. Assess the degree to which these financial policies support the firm's overall corporate strategy.
3. Identify the major stakeholders in the modern corporation. Explain how the interests of the stockholders in a multinational firm may be in conflict with other stakeholders.
4. Estimate the required rate of return for a firm, and where appropriate, its various divisions. Use this financial standard as a basis for making investment decisions that create value for the shareholders.
5. Understand how dividends and share repurchases affect the firm's financial statements and operating structure.
6. Estimate the firm's debt capacity and use it to choose a target capital structure that is consistent with the firm's overall corporate strategy.

VI. Class Organization, Procedures and Expectations

About 30 – 60 minutes of class will be devoted to lectures on selected topics. PowerPoint slides have been placed on Blackboard for you to review and print, but my lecture will focus on topics that do not always correspond to the PowerPoint slides. But these slides can be useful for review. You are expected to be ready to discuss all assigned material.

In addition to the lecture, we will discuss assigned cases (in-class discussion and the assigned hand-in case), current readings and engage in a group experiential exercise. Please work the assigned in-class cases and answer the study questions. Your class participation grade will be based on your ability to answer these questions in the class as well as questions of all other assigned work.

In each class period, I'll take a short amount of time to answer questions you may have about the assigned end-of-chapter problems. Please see the tentative schedule for the assigned problems. It is important that you work the end-of-chapter problems so that you can do the cases and have a "hands on" understanding of finance. Because of limited time, we will not have time to solve all of these problems in class. However, the solutions to these problems are posted on Blackboard, and if you have difficulty doing them after seeing the solution, please contact me.

VII. Case Write-up

There are two required case write-ups as shown in the Tentative Schedule. One case write-up is to be done individually and the other as a group. The individual write-up should be no longer than three pages inclusive of exhibits (such as tables, charts and figures). The group write-up should be no longer than four pages inclusive of exhibits (such as tables, charts and figures). In addition, you must have a cover page, and for the group case, another page (the last page of the write-up) that is an assessment of group member contributions. The cover page should have the name of the case, the name(s) of person(s) doing the case, the class

name and course number, and the date. For group the assessment of member contributions, please provide me with the percent contribution of each member so that the sum of the group member contributions must total 100%. Be sure that all group members agree on the percentages allocated to group members. Thought not required, you may add a brief description of each teammate's contributions. The paper must be written in 11 point font with at least 1" margins and double spaced. (Do not use a plastic cover for the report; staple the pages at the top left of the page). While you will be given many possible questions to consider and discuss, your case write-up will focus on only a few questions. Please clearly indicate in your write-up the questions that you are answering.

The recommended solution should be based on the available data in the case and address the decision and/or policy issues facing the firm. The grade you receive on the case write-ups will be based on your ability to provide a solution that you can defend well, one that is also supported from the facts of the case, and one that has a solid financial foundation. In addition, you will be graded on grammar, spelling, punctuation, format and general appearance of your case write-up.

In an effort to have objective evidence of each member's contribution, it is strongly suggested that all team members work the case separately prior to meeting with the team. Group members should also keep records of all the work done by each member. If a group is unable to make a decision on each member's contribution, please attach the written documentation for me to evaluate. My decision is final and there is no appeal.

The write-ups are due at the beginning of class on the class when it is due. No late write-ups will be accepted. For the group case, the team should consist of either three or four students (but no more than four). You will probably want to have the same group also for the Capital Budgeting Process Report and the Experiential Learning Exercise), although you are free to have different group members for each one).

Individual Case Write-up Questions (Nike, Inc: Cost of Capital):

Please answer the following questions:

1. Do you agree with Ms. Cohen's analysis (Exhibit 5)? Why or why not?
2. If you disagree with Ms. Cohen, calculate the component (debt and equity) costs of capital that could be used to estimate the weighted average cost of capital WACC). For the cost of equity, estimate the cost using the CAPM (eq. 7.3), dividend discount model (eq. 5.5) and earnings capitalization ratio (eq. 5.8). Which cost of equity method would you use? Why?
3. What are the weights attached to the (debt and equity) component costs used to estimate Nike's weighted average cost of capital? Please show the calculation of the correct weights.
4. What is your estimate of the weighted average cost of capital to be used for an investment in Nike?

Group Case Write-up Questions (Aurora Textile Company):

1. What are relevant cash flows for the Zinser investment? Hint: It may be best to create two spreadsheets – one for status quo cash flows (that is without the Zinser investment) and the other assuming the Zinser investment. For the status quo spreadsheet, create a spreadsheet with years (2002-2012) in columns and the following items as rows: sales volume, net sales (\$), cost of materials, conversion costs, SG&A, (-) depreciation, operating margin, NOPAT, (+) depreciation, chg. in inventory, and salvage value. For the Zinser machine spreadsheet, you may want to add the following rows to the status quo spreadsheet: net sale of old machine, Zinser investment, after-tax training cost and after tax salvage value. Assume a 36% tax rate. The bottom line should be the after-tax free cash flows, and the difference between the after-tax free cash flows from the two spreadsheets will be the incremental cash flows. Be sure to clearly show or explain your calculations including the investment outlay and terminal value.
2. What are the NPV and IRR of the incremental cash flows (that is, the difference between the free cash flows with vs. without the Zinser investment)? Use a 10% WACC).
3. Based on #1 and #2, would you recommend investing in the new Zinser machine?

XIII. Capital Budgeting Process Report

In this assignment, your group is required to select a firm and identify an individual within the firm with a good understanding of the firm's capital budgeting process, and interview this individual to learn as much as possible about the capital budgeting process. You may choose a firm where you are already employed provided that you are not already knowledgeable the capital budgeting process in your firm. You should not choose start-up firms because these firms have not had the opportunity or the experience to develop a sound capital budgeting process. Firms that are unwilling to provide the necessary information because of concerns of releasing confidential information should also be avoided.

You will be provided with a list of 12 questions that should be addressed in the interview. I'd suggest that you provide the questions to the person being interviewed prior to the interview in efforts to improve the quality of the responses. You may decide to ask additional questions. Feel free to ask questions based the subject's interests, your own interests, and the nature of the firm. To make the report more interesting, identify one or two techniques employed that by the firm that are inconsistent with the capital budgeting theory or procedures discussed in class. Explore these differences during the interview with follow up questions, and find out why the firm is using such methods. The goal is for you to reach a conclusion which is well supported whether a firm's deviation from the normative approach makes sense in light of the firm's specific situation. The final objective of the report is to make recommendations of how the firm could improve their processes.

The 12 questions are as follows:

1. Who is able to identify investment opportunities facing the firm?
2. Who are the decision makers in the firm with regard to capital budgeting decisions?
3. What performance measures are used by these decision makers (NPV, IRR, etc.)?
4. What is the cutoff rate (required return, hurdle rate) used and how is it determined?

5. Is the firm using risk-adjusted discount rate or not, and if so, how are they estimated?
6. Is the firm using a singular cut-off rate or multi-divisional cut-off rates? Why?
7. Are capital constraints applied, if so, how are the levels determined?
8. Does the firm lease assets, if so, how do they decide which assets to lease and why?
9. Does the firm do its acquisition analysis internally, and, if so, what models are used?
(Note: Basic capital budgeting techniques can be used to evaluate who companies just as they can be used for individual projects).
10. Does the firm invest internationally and, if so, how do they adjust their cost of capital or cash flows for risk?
11. Does the firm have any post-audit processes in place and, if not, why not?
12. Does the firm apply real option analysis, if not, why not?

Please provide me with the name, company and contact information for the person that you will be interviewing at the beginning of our fourth class meeting.

The written report should address the 12 questions. The write-up should be no longer than four double-spaced pages inclusive of exhibits (such as tables, charts and figures). In addition to these four pages, you may have a cover page and another page (the last page of the write-up) that is an assessment of group member contributions. The sum of the group member contributions must total 100%. Please use an 11 point font with at least 1" margins. (Do not use a plastic cover for the report; staple the pages at the top left of the page).

In addition to the written report, you will be asked to make a 6-8 minute oral presentation during the last class period. You are encouraged to divide up the questions among your team members so that everyone in your group participates. Your grade may be adjusted up or down no more than a few points depending on the quality of your presentation and staying within the allotted time.

To receive an "A" grade on the report, it is expected that the report is well written and easy to read, interesting, provides a reasonable response to the 12 questions, discusses all relevant aspects of the process that are inconsistent with the course material, provides and comments on firm's explanation for inconsistencies, and makes a well thought out recommendation to improve the firm's capital budgeting process. A report graded as a "B" is one where it is mostly well written but has some rough spots, is fairly interesting to read, does not answer adequately some of the questions, and/or does not adequately discuss inconsistencies. A grade of "C" has multiple problems as described above.

IX. Experiential Learning Exercise

In this exercise, we will examine Linear Technology's dividend policy decision. For this exercise you will have one of three roles: (a) a member of a consulting team recommending the payment of dividends, (b) a member of a consulting team recommending the repurchase of the firm's common stock, (c) a member of the Board of Directors of Linear Technology. I will assign each team (of three or four students) to one of these three roles so there will be multiple teams doing (a) and (b). Set (c) will consist of six to eight members (two teams of three or four per team).

Consulting Teams: You will present your professional opinions and conclusions to the board of directors at the upcoming board meeting. You can expect to be asked questions by board members. Before you appear before the board, the team must have a one page summary of your arguments and findings prepared. There will be two sets of consulting teams. One set will recommend paying dividends and the other will be recommending repurchase of shares. You will be assigned to only one set. For the set recommending dividends, the choice is between (a) paying regular dividends or (b) paying a special dividend. Be specific with regard to the dollar amount of dividends in aggregate, dividends per share and the time frame for the payment of these dividends. For the set recommending the repurchase of shares, be specific with regard to the repurchase share price, number of shares repurchased, and total repurchase amount. For both sets, provide the board of directors and me with a one page summary of the group's recommendations with justifications. Be sure to bring your notes to the board meeting. Be sure that keep your correspondence and opinions confidential from the other team and the board.

Board of Directors: As a member of the board, you will evaluate the arguments of each team of consultants. Your job is to decide which team presents the best arguments and to incorporate the information you decide in your final decision. As a board member you are expected to research the pros and cons of the various payout methods on your own. This will help you evaluate the competency of the arguments made by the consultants.

Board members are expected to hold their own private session prior to the official board meeting to assign individual duties, including electing a chair who will moderate the consultant's presentations, and who will formulate a general strategy. The board is required to bring a one page summary (one summary from each of the two teams) of their own research to the meeting (please make me a copy), but may also bring additional notes. As you hear the arguments from each team you are encouraged to ask questions. After the consultants have presented their arguments they will be asked to leave the meeting for ten minutes. At that time, you and the other Board members will render your decision about the best recommendation for Linear Technology. Your recommendation will be made known to all consultants. Your recommendation should be based on quality of the arguments presented.

Grading: Your grade on the experiential learning exercise will be factored into your participation and attendance grade. For the consulting teams, it will be based on the quality of responses to the Board members' questions and the written summary. For the Board of Directors, your grade will be based on time management and organization of the consultants, questions asked of the teams, the explanation of your decision and your written summary.

X. Attendance and Participation

Participating in class will give you the opportunity to learn from the diverse experiences and knowledge of your colleagues. The participation will be based on your general involvement in the class discussions including assigned cases.

Attendance is expected in this class, and therefore, I will keep an attendance record. The first step towards having first-rate participation is to be present in class. Missing a class

reduces the participation grade by 5- 10 points per class. Please keep in mind that you are responsible for any announcements made during class even if you absent.

Although a student's attitude is not explicitly in the participation grade, it may be considered in the determination of the final grade. Discourteous and/or unprofessional behavior to me and/or fellow students may adversely affect a student's grade. The amount of the grade reduction is at my discretion.

XI. Grades

Your final grade you receive in this class largely depends on your grades on the case write-ups, capital budgeting process report, and participation and attendance. The course requirements have the following grade weights attached to them:

| <u>Requirement</u> | <u>% of final grade</u> |
|----------------------------------|-------------------------|
| Individual Case Write-up | 25 |
| Group Case Write-up | 25 |
| Capital Budgeting Process Report | 30 |
| Participation and Attendance | 20 |

The final grading scale is as follows:

| <u>Letter Grade</u> | <u>Numerical Score</u> | <u>Letter Grade</u> | <u>Numerical Score</u> |
|---------------------|------------------------|---------------------|------------------------|
| A | 92-100 | B- | 80-81.9 |
| A- | 90-91.9 | C+ | 78-79.9 |
| B+ | 88-89.9 | C | 70-77.9 |
| B | 82-87.9 | F | 0 – 69.9 |

Once everything is taken into consideration, the numerical score is rounded no more than one-half point to determine your letter grade. Once final grades are submitted, I will not change grades based on subjective considerations or re-grade old exams or assignments.

XII. Other

The Bryan School has adopted expectation guidelines for faculty and students which can be found at http://www.uncg.edu/bae/faculty_student_guidelines_sp07.pdf. We will implement these guidelines. In addition, adherence to the Academic Integrity Policy (<http://academicintegrity.uncg.edu/complete/>) is expected and required of all students for all exams and assignments. Failure to abide by this policy will result in disciplinary action.

In the event of inclement weather, the class will strictly follow the University schedule. The University posts on its web page the status of class cancellation.

TENTATIVE SCHEDULE

Session 1:

Before Class Preparation:

Quick Reading Review (Covered in MBA 605)²; Chapters 1, 2, 3, 4, 6

Reading Topic: Cost of Capital; Chapter 5, 7, 8 (lecture on Chapter 8 only)

Suggested Practice Problems (Chapter 8): A3, A4, A5, A7, A9, B5, B8, B10³, C1, C2

Assigned Case for In-class Discussion: Pioneer Petroleum (Harvard Case 9-292-011)

In-Class:

Topic: Overview of Corporate Financial Strategy, and Investment vs. Financing Decisions

Lecture on the Cost of Capital

Case Analysis: Pioneer Petroleum (Harvard Case 9-292-011)

Session 2:

Before Class Preparation:

Individual Case Write-up: Nike, Inc (Darden Case UVA-F-1353). See questions relating to cost of capital in Section VII of syllabus.

Reading Topic: Capital Budgeting Cash Flows; Chapter 9, 10 (lecture on Chapter 10 only)

Suggested Practice Problems (Chapter 10):⁴ A2, A10, A11, B2, B7, B10, B15, B20

Assigned Problems for In-class Discussions: Perma Filter Co. and Jip-Sum Corp. (on Blackboard)

In-Class:

Nike, Inc.: Cost of Capital Individual Case Write-up Due

Discussion of Nike, Inc.: Cost of Capital Case (Darden Case UVA-F-1372)

Lecture on Capital Budgeting

Problems Analyses: Perma Filter Co. and Jip-Sum Corp.

Session 3:

Before Class Preparation:

Reading Topic: Capital Budgeting in Practice; Chapter 11

Suggested Practice Problems: A1, A5, A7, A8, B2, B4, B6, B8

Assigned Case for In-class Discussion: Euroland Foods, S.A. (Darden Case UVA-F-1356)

Current Literature Reading: Danielson and Scott, "The Capital Budgeting Decisions of Small Businesses" (Blackboard)

In-Class:

Lecture on Capital Budgeting in Practice

Case Analysis: Euroland Foods, S.A. (Darden Case UVA-F-1356)

Discussion of Danielson and Scott, "The Capital Budgeting Decisions of Small Businesses"

² Class discussion will focus primarily on the reading chapter(s) directly on the topic for the evening. Review chapters are recommended as background reading. Background reading topics were already discussed in MBA 605.

³ This problem assumes semiannual payments (unlike problem B6).

⁴ Solutions to problems have been posted on Blackboard. Contact me if you have any questions.

Session 4:**Before Class Preparation:**

Group Case Write-up: Aurora Textile Company (Darden Case UVA-F-1536) See questions relating to the case write-up in Section VII of syllabus, and class preparation questions in the tentative schedule.

Reading Topic: Why Capital Structure Matters; Chapter 16

Suggested Practice Problems (Chapter 16): A2, A4, A5, A8, B5, B6, B8, C2

In-Class:

Name and Contact Information for Capital Budgeting Process Report Due

Aurora Textile Company Group Case Write-up Due

Lecture on MM Capital Structure Arbitrage and Valuation

Session 5:**Before Class Preparation:**

Reading Topic: Managing Capital Structure; Chapter 17

Suggested Practice Problems (Chapter 17): A2, A3, B1, B4, B5, B6, B7

Assigned Case for In-class Discussion: Debt Policy at UST Inc. (Harvard Case 9-200-069)

In-Class:

Lecture on Managing Capital Structure

Case Analysis: Debt Policy at UST Inc. (Harvard Case 9-200-069)

Session 6:**Before Class Preparation:**

Reading Topic: Dividend Decisions; Chapter 18

Suggested Practice Problems (Chapter 18): A7, A9, A10, B3, B4, B5, B6, B9

Assigned Case for Experiential Learning Exercise: Dividend Policy at Linear Technology (Harvard Case 9-204-066)

In-Class:

Lecture on Dividend Policy

Experiential Learning Exercise: Dividend Policy at Linear Technology (9-204-066)

Session 7:**Before Class Preparation:**

Assigned Case for In-Class Discussion: Dividend Policy at Linear Technology (Harvard Case 9-204-066)

Complete Capital Budgeting Process Report

Current Literature Reading: Cohen and Yagil, "A Multinational Survey of Corporate Financial Policies" (Blackboard)

In-Class:

Capital Budgeting Process Report Due

Case Analysis: Dividend Policy at Linear Technology (Harvard Case 9-204-066) (discussion of case questions)

In-class Presentations of Capital Budgeting Process Reports

Discussion of Cohen and Yagil, "A Multinational Survey of Corporate Financial Policies"

Case Study Questions for In-Class Discussion

Pioneer Petroleum

1. Does Pioneer estimate its overall corporate weighed average cost of capital correctly? If not, re-estimate the WACC (showing and/or explaining your calculations).
2. Should Pioneer use a single corporate cost of capital or multiple divisional hurdle rates in evaluating projects and allocating investment funds among divisions? Why or why not? If multiple rates are used, how should they be determined?
3. How should Pioneer set capital budgeting criteria for different projects within the same division? What distinctions among projects might be captured in these criteria? How should these different standards be determined?

Euroland Foods

1. What are the investment measures in case Exhibit 3 and what do they measure?
2. Prepare to discuss the strengths and weaknesses of the various measures of investment attractiveness as used by Euroland Foods. Will all of the measures rank the projects identically? Why or why not?
3. Please rank the 11 proposals on the basis of purely economic considerations.
4. Rank the proposals a second time based on any other considerations that you believe are important. Are the rankings identical? Why or why not? (Hint: Check to see if all the projects are listed. Also, what capital budgeting ranking method might be helpful in a capital rationing environment? Why?)
5. Which set of projects should Verdin recommend to the board of Euroland Foods for the capital budget of 2001?

Aurora Textile Company

1. How has Aurora Textile performed over the past four years? Be prepared to provide financial ratios that present a clear picture of Aurora's financial condition.
2. What are the after-tax cash flows for each of the investment? Assume a 10% WACC and a 36% tax rate). What are the value drivers in your analysis?
3. What are the NPV and IRR of the resulting cash flows? How do you interpret these numbers?
4. Perform a sensitivity analysis. What happens to the NPV if, for example, the project has a zero salvage value, and also, if it lasts only four years or six years (with a 36% tax rate)?

Debt Policy at UST Inc.

1. What has been UST's historical financial performance (compound annual growth rate (CAGR) over 5 and 10 years) in sales, EBIT, EPS, gross profit margin, net margin, ROE and dividend payout? (Exhibit 3)
2. Compare the gross margin, net margin, ROE, ROA, debt/book capitalization, debt/market capitalization, EBITDA/interest coverage and corporate debt rating compared to their competitors. (See Exhibits 5 and 6).
3. Assume net sales grow at 5% from 1998 (see Exhibit 3) to 1999, EBIT is 53% of sales, and a 38% tax rate. Construct income statements with no debt and with \$1 billion in recapitalization at the following interest rates: 7.05% (A rating), 7.82% (BBB rating) and 8.7% (BB rating) as shown in Exhibits 6 and 8. The income statements should have sales, EBIT, interest, pre-tax earnings, taxes

and net income. Determine the interest coverage (EBIT/Interest) assuming UST issues \$1 billion in debt assuming each of these three bond ratings may occur.

4. Because the recapitalization plan changes the firm from a total equity firm to a leveraged firm, the tax benefit to the shareholders is the tax rate multiplied by the increase in debt. Calculate this tax shield.
5. What is the new value of the firm if shareholders get the benefit of this tax shield (4 above), the value is added to current value of equity of the firm (MV shown in Exhibit 3 in 1998)?
6. Assume that the stock price increases from a current price shown in the year-end 1998 stock price in Exhibit 3 by the percentage increase in value caused by the tax benefit. The percentage increase in value is determined by the tax benefit from debt recapitalization (4 above) divided by the market equity value \$6,469.
7. How many shares can be repurchased at the new stock price (6 above)? How many shares are outstanding after the repurchase?
8. What is the new debt/market equity value? Calculate this ratio based on the \$1 billion in debt and the new equity value.
9. Compare the EPS and dividends per share in 1998, 1999 (no debt pro-forma) and 1999 (\$1 billion, 7.82% interest rate pro-forma). For the pro forma statements assume the dividend payout stays at 64%. What is the growth rate in the dividends per share implied in each scenario?
10. Based on your analysis, do you recommend the \$1 billion recapitalization plan? If so, would you implement it in stages or all at one time?

Dividend Policy at Linear Technology (*spreadsheet of case exhibits available on Blackboard*)

1. What is Linear Technology's dividend payout policy? Do they seem to have a long-run target payout ratio with a partial dividend adjustment process?
2. What is Linear Technology's cash balance in 2003, and assuming this balance, a risk-free interest rate of 3%, a corporate tax rate of 35%, how long could they fund a \$0.06 per share quarterly dividend?
3. What is the historical context of tax rates, market to book ratios, and dividend initiation rates as shown in Exhibits 7, 8 and 9? How are these relevant to Linear Technology's decision?
4. What are the tax consequences of keeping the cash inside the firm using a MM framework? Using the formula relating municipal and corporate bond rates, that is $r_{\text{muni}} = r_{\text{corporate}}(1 - t_p)$, what is the implied t_p from Exhibit 8? What does this tell you about Linear Technology's decision to hold cash and its use of leverage?
5. Ignoring the signaling aspects, what is the expected share price of (a) retaining \$1.5 billion versus (b) repurchasing shares and (c) paying a \$1.5 billion dividend? Use the stock price (Exhibit 2) and number of shares outstanding (Exhibit 3) at the end of 2002 shown as the starting point.
6. Assume the \$1.5 billion in cash earns 3% interest. Also assume that net income will be the same at the end of 2003 as in 2002 and that payment of a dividend or repurchase precludes earning interest on the \$1.5 billion. What would be the (a) total net income (earnings) of the firm, (b) number of shares outstanding, and (c) earnings per share at the end of 2003?
7. Assume that the tax rate on capital gains is the same as on dividends (perhaps 15%). From a tax perspective, does it matter whether the firm pays a dividend or repurchases shares? Why or why not?
8. What are the signaling implications of paying a dividend? Does Linear Technology's current level of dividends signal anything about the future prospects of the firm?
9. Consider the agency aspects of the dividend versus repurchase decision. Do the executive stock

- options create a potential conflict of interest between managers and shareholders? Why or why not?
10. What is a clientele effect? Is there evidence of a clientele effect from Exhibit 4? How are the comments of Blaine Rollins (manager at Janus Fund) relevant to the clientele effect?