# 14.22 Assignment 4 - Due Friday, April 9

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**Problem 1**

Read the paper by Hall and Liebman, "Are CEO's really paid like bureaucrats?" and write a short (2 pages) essay summarizing and critiquing their findings. Some issues you may wish to address are:

1) Why are we disturbed by low elasticities of CEO compensation to firm performance? Are we also disturbed by high levels of CEO compensation?

2) On page 3 and later on page 8 the authors assert that a number of CEO decisions involve choosing from among a discrete set of projects. What are the implications of this for the optimal incentive scheme? Do you find their argument convincing that this sort of decision is important in the real world?

3) Strong incentives would be given if CEO's simply bought the company. The authors assert that low levels of CEO wealth make this impossible. What does this say about the nature of capital markets? Also, the authors' calculations suggest that risk-aversion plays a large role in limiting the stake of CEO's in their companies. Why does risk-aversion matter, and do you find these calculations convincing?

4) The authors focus a lot on compensation through the granting of stock options. Why would a company wish to compensate a CEO with stock options rather than direct stock holdings? The paper documents that compensation through stock options has grown significantly since 1980. What does this say about the validity of the Jensen and Murphy (1982) estimate?

5) What are the implications of focussing on *relative* rather than absolute firm performance? Is there any rational in compensating CEO's based the firm's performance percentile?

6) Is there any way to tell whether these contracts are efficient? How does the efficiency of these contracts change if we consider other incentive mechanisms, like life-cycle compensation, tournaments, and firing? Do you think the authors have adequately dealt with these issues?

7) Can you think of any rationale for the trend of increasing pay-for- performance the authors document?