

Applied Microeconomics: Supervision 6

The first essay question will be marked. Limit 1500 words, be precise with your answer and note essay technique comments below and on the course web page. The second essay should be done in note form.

Essay technique

Begin with an introduction which outlines clearly what you are going to do in the essay, what structure your essay will have and what its punchline is (e.g. first, I will explain the basic signalling model and show why any equilibrium is possible. Second, I will show why this result is specific to the timing of the model and is not robust. etc. My key conclusion is that results from adverse selection models need to be related to the specific problem being analysed and it is hard to draw general conclusions because of the non-robust nature of many models). I cannot stress enough how important it is that you provide these sort of roadmaps to your essays - examiners need this help to follow your arguments.

Look on the course web page for further suggestions.

Readings

- On theory:
 - Milgrom and Roberts Economics, organisation and management Chs 6,7
 - Laffont, J.-J. and Martimort, D. The theory of incentives esp ch 4.
- On evidence:
 - Edmans, A. and Gabaix, X. (2016) “Executive compensation: a modern primer” Journal of Economic Literature **
 - Prendergast, C. (1999). “The Provision of Incentives in Firms” Journal of Economic Literature, 37, 7-63
 - Frydman, C. and Jenter (2010) “CEO Compensation” NBER Working Paper 16585
 - Bebchuk and Fried (2004) “Pay without performance”
- On banking:

- Besley and Ghatak (2013) “Bailouts and the optimal taxation of bonus pay” *American Economic Review*, 103(3): 163-167
- Gregg, P., Jewell, S. and I. Tonks (2012) “Executive pay and performance: did bankers’ bonuses cause the crisis?” *International Review of Finance* 12:1 89-122
- On regulation:
 - Joskow, P.L. (2014) “Incentive Regulation in Theory and Practice: Electricity Distribution and Transmission Networks”
<http://www.nber.org/chapters/c12566>
 - Newberry, D. (1998) “Rate-of-return regulation versus price regulation for public utilities” *New Palgrave Dictionary of Economics*
<http://www.esewm.econ.cam.ac.uk/people/emeritus/dmgn/files/palgrave.pdf>
 - Mayer, C. and Vickers, J. (1996) “Profit-Sharing Regulation: An Economic Appraisal” *Fiscal Studies* vol. 17, no. 1, pp. 1-18

Short Questions

1. In the US, private health insurance is usually purchased by groups rather than individuals. For example, most people are insured through their employer or their spouse’s employer. Explain.
2. “Almost everyone suffers from a common cold now and again. Therefore it would be good if everyone purchased insurance to cover the cost of cold medicine and time lost when they have a cold.” Comment.
3. Why does rate-of-return regulation lead to excess investment in capital?
4. In what circumstances will RPI-X regulation lead to insufficient investment in cost reduction?
5. How might incentives in the financial sector have caused excessive risk taking?

Problems

1. (2014 Exam Paper) A worker chooses how much effort to exert without knowing the state of the economy. She has preferences over her (uncertain) income and effort as follows:

$$U(w, e) = E[\tilde{w}] - \frac{1}{2}\rho \text{var}(\tilde{w}) - \frac{e^{1+\lambda}}{1+\lambda}$$

Effort has an effect on profits as follows:

$$\pi = x + e$$

where x is the state of the economy, which is unknown to the worker and is unobservable to the firm's owner. Both the worker and the firm's owner observe profits.

- (a) How might the firm's owner use information on profits to incentivise the worker?
- (b) Suppose now that the firm wants to maximise profits over a long horizon, with effort being chosen in each period by the worker. Suppose further that the random variable, x , follows the process:

$$x_{t+1} = \rho x_t + \eta_{t+1}$$

where η_{t+1} is independent over time. How should the intensity of the firm's incentives change over time? Does your answer depend on the value of ρ ?

Essay Questions

1. Evidence on contracts for Chief Executive Officers shows that many contracts guarantee a substantial income even when the firm makes a large loss; and yet pay bonuses when the firm does well, even when all firms in the sector do well. Is this consistent with contracts being in the shareholders interests?