Corporate Governance

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Introduction

- Firms are not just individual entities they are made of individuals: workers and managers and shareholders
- Conflicts of interests may arise when interests of individuals or groups differ
- Principal agent problem
- May need incentive schemes to deal with

Principal agent

- Main problem in business concerns conflicts of interests between managers and owners
- Shareholders interested in maximising return or value of assets
- High profits, rising stock prices
- Managers may be interested in same

Principal agent

- But other possible objectives include:
  - Minimising effort
  - Maximising job security
  - Avoiding failure
  - Enhancing reputation and employment opportunities
  - Consuming prerequisites
  - Maximising and compensation

Principal agent

- Managers may have strategies that suit them rather than the principals: eg maximise sales rather than profits, minimise effort
- Consider the general problem:
  - principal employs an agent to produce an output
  - Principal cant observe output

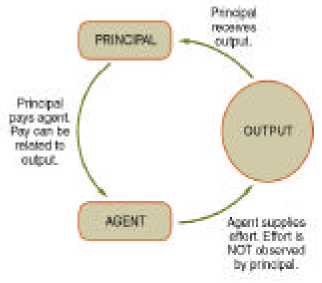

FIGURE 16.1 The Principal-Agent Problem

Principal agent

- Need to align interests in some way
- Moral hazard problem
- Examples:
  - Separation ownership and control
  - Corporate governance: shirking
  - Charitable giving: excessive
  - Influencing takeovers

Principal agent model

- Consider no risk situation
- To achieve target profit requires effort by managers –sacrifice
  - $\Pi = R(e) - (S+C)$
  - Revenue based on effort less managers (flat) salary and other costs
  - U(e) disutility of supplying effort
  - $B(e) = K - U(e)$ net benefit to manager

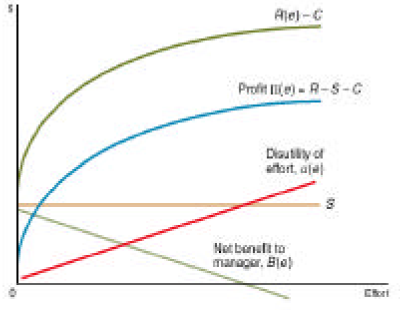

FIGURE 18.3 The Principal-Agent Problem with a Flat Salary

Principal agent

- The manager is paid a fixed amount
- The manager minimises effort
- Revenues and profits suffer

Principal agent

- Solution is to reward managers based upon their effort
  - $S(e) = S + U(e)$
  - $\Pi(e) = R(e) - S(e) - C$
    $= R(e) - (K + U(e)) - C$
  - Solve for profit and hence effort
  - $d\Pi(e)/de = dR(e)/de - dU(e)/de = 0$
- Marginal benefit from effort in terms of increased revenue is equal to the marginal cost of compensating managers for effort
- Shareholders would want to get e^*

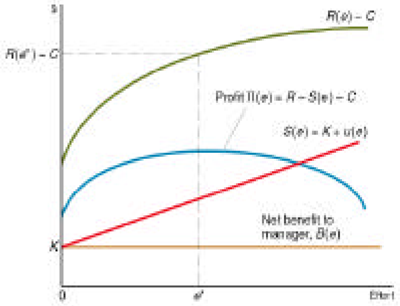

FIGURE 18.5 The Principal-Agent Problem with Pay as a Function of Effort

Principal agent

- Manager will get:
  - $B(e) = S(e) - u(e) = K + U(e) - u(e)$
  - If $U(e) = u(e)$ then $B(e) = K$
  - Manager compensated for effort and happy to provide
- But how principal ensure e^*
- Need to be able to observe and evaluate without cost
- But cannot

Principal agent

- So effort cannot be rewarded directly
- Solution is to give the manager a share of profits as bonus

  Then $S(e) = U(e) + \alpha\Pi(e)$

  So $\Pi(e) = R(e) - U(e) - C$
- Net benefit to manager is now

  $B(e) = S(e) - u(e) = U(e) + \alpha\Pi(e) - u(e)$

  And if $U(e)$ is set equal to $u(e)$ $B(e) = \alpha\Pi(e)$
- Both principal and agent are interested in maximising profit

Principal agent

- Have incentive compatibility
- Step 1: Manager chooses level of effort to maximise $\Pi(e)$
- Step 2: Firm chooses α such that the compensation package s competitive
- Have incentive compatible contract

Principal Agent

- Principal agent problems will generally observe risk
- This means compromises
  - Management success can be luck
  - Effort may not show up in success
- Executive compensation will need both:
  - Efficiency: as dealt with before
  - Risk sharing: divide between stakeholders
    - Managers less diversified interests
    - Risk can be more easily taken by shareholders than managers
    - Should pay flat salary?

Principal agent

- Reconcile by sharing risk

  $R(e) = Rm(e) + Ro(e)$

  m is under managers control o not

  $S = K + \alpha\Pi(e)$

  $\Pi(e) = Rm(e) + Ro(e) - E - C$

  $B(e) = EU(S) - u(e) = EU(E + \alpha\Pi(e)) - u(e)$
- Owner pays some flat pay to provide some income to risk averse manager, plus share of profits to encourage effort
- This increases revenue and profit
- No payment directly related to effort as not observable

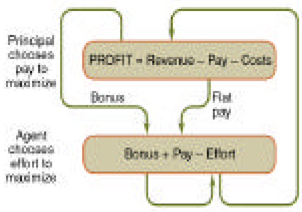

FIGURE 18.6 The Principal-Agent Problem When Effort Is Not Observable

Compensation plans

- Compensation plans can be designed to motivate effort with different levels of risk imposed on them
- W is wealth

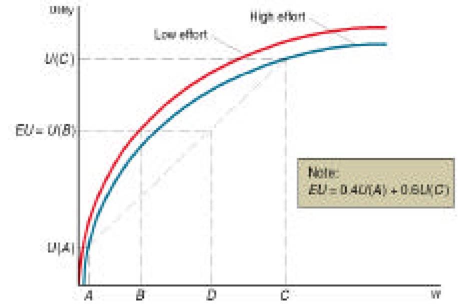

FIGURE 18.7 The Effect of Compensation Schemes on Managerial Effort

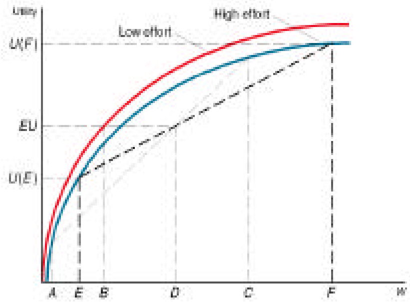

FIGURE 18.8 Reducing Managerial Risk with Stock Options

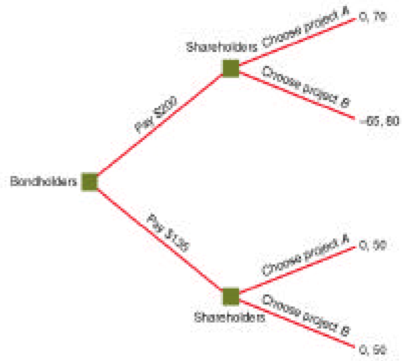

FIGURE 18.9 Will Shareholders Pull the Bait and Switch?