- Chapter 9 – An Analysis of Conflict

Recap

- The course to date has focused on accounting in the context of the management - investor relationship:
  - single person decision theory suggests that investors need information about future cash flows
  - the decision usefulness approach suggests that
    - investors find accounting information, particularly the income statement, useful
    - market is reasonably efficient
    - we should move towards fuller disclosure
  - the measurement approach suggests that accounting should (and is) incorporating more information about expected future cash flows, places more emphasis on the balance sheet

Recap

- Within this context, management should be indifferent to different accounting policies that affect income (level or variability) as long as cash flow is unaffected. This is not the case.
- Positive accounting research has shown that firms are not indifferent among accounting policies: firms in certain circumstances tend to favour certain types of accounting policies.
- Why do we have contracts (employment, lending) if they lead to this behaviour?

Agency Theory

- Agency theory, a branch of game theory, which studies the design of contracts between principal and agent that motivate the agent to work in the best interest of the principal.
- An efficient contract will do this at the lowest cost to the principal.
- In many cases the effort of the agent is not directly observable by the principal – this creates a moral hazard problem – agent needs to be sufficiently motivated to work hard.

Relevance of Agency Theory to Accountants

- Examples of agency relationships:
  - professional atheletes, professionals (lawyers, doctors, accountants, …) how are they motivated to work hard?
- Managers bear considerable risk of changes in accounting policies, most significant are those that cause income volatility
- Holmstrom: accounting competes with share price as performance measure

Holmstrom

- Properties of a good performance measure = the best trade off between <u>sensitivity</u> and <u>precision</u>
- Properties of good information to investors = best trade off between <u>relevance</u> and <u>reliability</u>

Agency contracts between firm owner and manager

- Example 9.1 – A Firm Owner-Manager Agency Problem
- single owner (principal) and single manager (agent)
- contract for a single period
- payoff = $100 or $55 cash flows

- If the manger works hard they will realize \$100 60% of the time and \$55 40% of the time
- If the manger does not work hard they will realize \$100 40% of the time and \$55 60% of the time
- The manager will be paid a fixed salary of \$25

- Expected utility = value of the payoff to that individual (ie. owners EU is 57 if the manager works hard)
- Owner's expected utility if manager <u>works hard</u>
- EU = 0.6 x (100 – 25) + 0.4 x (55 – 25)
- = 0.6 x 75 + 0.4 x 30
- = 45 + 12
- = 57

- Owner's expected utility if manager <u>does not work hard</u>
- EU = 0.4 x (100 – 25) + 0.6 x (55 – 25)
- = 0.4 x 75 + 0.6 x 30
- = 30 + 18
- = 48

- What does the manager have to do for the owner to get maximum utility? … 57 > 48

- Let's assume that the manager is risk averse and their expected utility is = the square root of their remuneration ($\sqrt{25} = 5$)
- However, the manager is also effort averse, working hard reduces their expected utility by 2 (5 – 2 = 3 expected utility of working hard)
- Not working hard (still working) creates a disutility of 1.71 (5 – 1.71 = 3.29 expected utility of not working hard
- What will they choose?

- What can be done to protect the owner from managers not working hard?
  - Don’t hire the manager
  - Design contracts to control moral hazard
  - Direct monitoring (first best)
  - Indirect monitoring
  - Rent the firm to the manager
  - Give manager a share of the profits (base compensation on a performance measure)

Earnings Management

- An example of a performance measure is net income
- If their compensation is based on net income, managers have a bias to engage in earnings management
- Net income is a mixed measurement model (not ideal conditions) so earnings management is possible

Summary Single Period Agency Model

Protecting Lenders from Manager Information Advantage

Implications of Conflict Theory on Accounting Theory