## **Information & Data**

### What is information

• Data organized in a meaningful way to be useful to the user

#### **Qualities of Information**

- Relevance
  - o Predictive Value
  - Feedback Value
  - Timeliness
- Reliability
  - Verifiability
  - Neutrality
  - o Representational Faithfulness

### **Economics of Information**

- Information asymmetry
- Costly
- Imperfect
- Information provides value to allow individuals to make choices that increase expected payoffs.

## Information Asymmetry

- Adverse Selection
  - One or more parties has information advantage over others
- Moral Hazard
  - Where one or more parties can observe their actions in fulfilment of the contract but others cannot.
    - Insured person observed to be more reckless after policy is purchased, which is unobservable by the insurer.

## Signalling

## Two types of entities

- High quality firms
  - Tend to signal as benefits usually outweigh costs
- Low quality firms
  - o Tend not to signal unless benefit outweighs costs

## Separating Equilibrium

- High quality firms motivated to signal and low quality firms are not
- Accurately distinguish quality of firms by outsiders

## **Pooling Equilibrium**

- Both high and low quality firms benefit from signaling
- Unable to distinguish quality of firm

To reduce dishonest signaling, give benefits to honest signals and increase costs to dishonest signals

Signal is an action taken by a high type manager that would not be rational if that manager was low type, through observable financial information to portray non observable qualities to investors.

- Increases credibility of signal
- Binding as it is a costly commitment to do signals
- Verifiable by Third Party/External Auditing

# **Agency Problem**

- Pursuant of self interests to the detriment of the company
- Problem can be fixed through
  - Monitoring costs
    - Costs to produce and verify by external auditors of the financial reports
  - Bonding Costs
    - Alignment of interests
      - Rewards for good performance of company etc
  - Residual Loss
    - Charging of the losses of the company to managers
      - Incentive to not make losses