Bond Terminology

- Foreign Bonds: Bonds sold in foreign markets denominated in that country's currency (to local investors in that place) … Ashok Leyland FCCB's and other FCCB's are examples
- Bearer Bonds: The bond holder must present/send the certificate to claim the payments (interest and principal)
- Bond Covenants: Clauses to protect the bondholders' interests

Insurance

- Most businesses face possibility of a hazard that can bankrupt
- Neither financial nor business risk … guess?
- However, the cost and risk of a loss can be shared by others (or even transferred)
- Consider, Reliance's case
- If experts report that a X in 100000 chance exists that Reliance could be destroyed in a war over the course of the next year
- How can the cost of this hazard be shared?
- An Insurance Policy is a contract that bounds an insurer to indemnify a client against a specified loss in exchange of a set payment, or *premium*, in advance.
- Existence of insurance companies

Insurance

- Fire in a House: Loss Rs.1 Lakh (probability: 10%) OR Zero
- Expected Loss: Rs.10000. The risk of this payoff is its S.D.
- Two houses: Probability (Loss) 0.01, 0.18, 0.81
- S.D. of expected loss for each house owner will decrease as n increases
- Insurance does not reduce the amount of losses, the probability of occurrence, nor the uncertainty of an individual as to whether or not the event will occur
- If group wants 95% confidence in its claims paying ability (i.e., actual losses are within two standard deviations of the expected loss)
- Losses expected + 2*(SD of losses)

Premiums for a Mutual Insurance Company as a Function of N Policy Holders

N	95% Confidence	99.9999% Confidence
1	70000	100000
10	28974	55062
100	16000	24250
1000	11897	14506
10000	10600	11425
100000	10190	10451
1000000	10060	10143

Insurance

- A large number of companies with similar risk can each contribute into a fund that is set aside for sharing the risk as a group
- By pooling funds to take care of this contingency, firms can withstand losses
- What would the cost to each group member be for this protection?
- The cost to each member would be the expected value of loss (zero-NPV deal)
- *plus* administrative/operating expenses, adverse selection, moral hazard, capital, and investment performance

Insurance

- Most insurance risks are jump risks
- The loss of Reliance by a war may be X in 100000. The risk, however, is larger for an insurance company since all the firms in the same area may be insured. The result is a much larger risk for the insurer.
- Answer: Could be … Catastrophe Bonds (Reinsurance)
- These allow insurers to transfer their risk to bond holders by selling bonds whose cash flow payments depend on the level of insurance losses NOT occurring
- So, there is also a way to spread their risks (coinsurance or reinsurance for insurance firms)