FRM Part 1

Foundations of Risk Management

Financial disasters

1. Chase Manhattan Bank & Drysdale Securities

   Drysdale borrowed from chase

   ↓

   Bought bonds

   ↓

   Value of bonds declined – Couldn't repay

   ↓

   Drysdale bankrupt

   - Drysdale exploited a flaw in computing value of collateral. (Collateral valued without considering accrued interest)
   - Chase did not notice in the contract, that if would be held responsible for any payments due.
   - Develop accurate methods for evaluating value of collateral.
   - Approval of risk control function when issuing funds.

2. Kidder Peabody

   Owned by GE (General Electric)

   - Head of trading desk, Joseph Jett misreported earnings.
   - Substantial artificial profits.
   - Took advantage of computer's A/c error.
   - Computer system used for reporting government bond activity failed to A/c for forward contract's present value.
   - Importance of investigating large profits from unknown trading strategies.

3. Barings – Nick Leeson
    - Hold speculative derivative positions.
    - Hid positions fraudulently.
    - Sold straddles & went double long positions on Nikkei.
    - Earthquake hit Japan – markets went down – losses on a both positions.
    - Was also the in charge of settlement process, ∴ influenced back office employees & used an old “Error A/C to book & hide losses.
    - Lack of oversight process.
    - Reporting to multiple managers created ambiguity.
    - Management weak – failed to establish controls.
    - Systems of checks and balances should be created.

4. Allied Irish Bank - AIB.
    - John Rusnak – currency trader made losses in millions.
    - Bullied back office workers, but their supervisor realized.
    - Created fake trades to hide real ones.
    - Made the strategy look less risky.
    - Reported modest gains to avoid raising red flags.
    - Entered false positions in the system to calculate VAR.
    - AIB management inexperienced.
    - Suspicious trades & profits were ignored.
    - Similar to “BARINGS” but Rusnak was not running back office but he bullied them.
    - OTC market contracts did not require cash settlements.

5. Union Bank of Switzerland - UBS.
    - Huge investment in LTCM (Long Term Capital Market) – which failed & UBS considered it less risky. LTCM wasn't transparent.
    - Too much independence to the derivative business.
    - Risk manager was head of quants analytics, had his compensation tied to trading results.
    - Had to merge with SBC due to losses.

6. Societe General
    - Trader entered in large unauthorized trading activity. Created fake transaction to hide them.
    - Cancelled the trades immediately before confirmation timing.
    - Incorrect handling of trade cancellations.
    - Lack of proper supervision.
    - Inability of bank to check gross positions. (it checked only net positions)
    - Large amount of trading commissions should have raised red flags.
    - Mandatory vacation ruled should be enforced. Another trader comes in position & can uncover frequent activities.
    - P/L outside normal range should be investigated.

7. Bankers trust - BT
    - Procter and gamble (P&G) & Gibson greetings – went to Bankers trust.
    - BT used derivatives to reduce their funding cost – using high probability to reduce cost but low probability of significance losses.
    - BT made derivative structure complex.
    - P&G could not get quote from other bankers.
    - Thought the trades to be tailor made for them.
    - Suffered huge losses.
    - BT's conversations were taped -they talked about fooling their clients.
    - CEO resigned.
    - Important to exercise caution.
    - Important to match trades with client's needs.

8. Long term capital management – LTCM
   - Work with Salomon Brothers (Citigroup now).
   - Generated great profits initially.
   - Thus investors provided funds even through LTCM was secretive about its trading positions.
   - Funds tied in long term strategy to prevent liquidation.
   - Leverage 28:1 (Economic leverage increased)
   - Relative value, credit spread & equity volatility strategies.
   - LTCM had assumed that low frequency & high quality events were uncorrelated. VAR models thus underestimated risk.
   - All strategies were based on the notion that risk premium & volatility shall decrease.
   - Falling price increased mark to market. LTCM being a hedge fund had less regulatory obligation.
   - Initial margin should be provided –ensure.

Need for greater disclosure, stress testing & to factor in potential liquidation cost into prices.