Assignment - UNIT 1 & 2

1. Risk management process is a formal series of actions designed to determine if the ~~perceived~~ perceived reward justifies the expected risks. Risk management process involves following five steps:
1. Identify the risks, ~~do~~ classify to known ~~and~~ or unknown. ~~it~~
2. Determine the method to measure risk.
3. Perform a cost benefit analysis on the risk transfer
4. Develop a risk mitigation strategy
5. Assess performance and amend risk mitigation strategy.

2. Problems and Challenges.
- Risk management will be beneficial to the economy if that risk is ~~sufficiet~~ suffiently dispersed among willing and able participants in the economy.
- Risk management has not consistently been able to prevent market disruptions or to prevent business accounting scandals resulting from breakdowns in corporate governance.
- The use of derivatives as complex trading strategies assist in overstating the financial position of many entities and complicate the level of risk assumed by many entities. Derivatives markets make it easier to take on large amounts of risk.
- The "herd behavior" of risk managers after crisis gets underway (e.g selling risky asset classes when risk measures reach a certain level) actually increases

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market volatility.
• Every ~~fian~~ financial instrument that allows a company to transfer risk also allows other corporations to assume that risk as a counterparty in the same market

3. Conflict of interest affect a risk management program ~~is~~ in many ways :-
1. Organisations with a poor risk management and risk governance culture sometimes allow powerful business leaders to exaggerate the potential returns while diminishing the perceived potential risks.
2. Management itself might be tempted to ~~leaves~~ leave gaps in risk measurement that, if mended, would distrub the reported profitability of a business ~~frans~~ franchise.
3. In many firms across a broad swathe of industries, bonuses are paid today on profits that may later turn out to be illusory, while the cost of any associated risks is pushed, largely unacknowledged, into the future.
4. The implied cost any risk can be artificially reduced by applying poor or deliberately distorted risk measurement techniques.
5. Decisions about risk and return can become seriously distorted across whole financial industries when ~~poor~~ poor industry practices and regulatory rules allow this to happen.

4. Risk is classified into many segments:
1) Market Risk
2) Credit Risk
3) Liquidity Risk
4) Operational Risk
5) Legal and Regulatory Risk
6) Strategic Risk
7) Business Risk
8) Reputation Risk

Operational Risk refers to potential losses resulting ~~losses~~ from a range of operational weaknesses like:
i) inadequate processes, people, system or external ~~kind~~ events. (systems risk, technology risk, etc.)
ii) Insufficient internal control, fraud and incompetent management.
iii) Human error
iv) Natural disaster
v) Model risk.

Strategic Risk refers to the risk of significant investments for which there is a high uncertainty about success and profitability.
Strategic risk can be due to various factors like:
- Large investments in new business/product which may fail.
- change in regulation, market condition, industry requirement.
- Impact of this risk is large loss of confidence by investors.

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5. Risk Management Strategies.

Firms can use different strategies to manage their risks. They broadly can be classified in the following:
- Accept the risk
- Avoid the risk
- Mitigate the risk
- Transfer the risk

~~Brif~~ Brief Explanation.

- Accept the risk: One reason to retain a risk is that it is perceived to have a ~~so~~ small impact on the firm and managing the risk might prove more costly than it is worth.

- Avoid the risk: If a business risk is not a natural part of normal business operation, then it should be considered as a possible risk to avoid.

- Mitigate the risk: Mitigation can take many different forms depending on the risk factor involved. For eg. A bank may mitigate credit risk by offering loans at higher interest rates, with shorter maturities and/or with enhanced collateral requirements.

- Transfer the risk: Transfering can be costly because it usually involves either purchasing insurance coverage or investing in derivatives. Transferring risk also introduces counterparty risk because the firm is relying on the third party.

to make good on the insurance provided if a risk event arises.

6. The different types of risks which can be hedged against are:
1. Pricing Risk - The cost of inputs ~~may have~~ may have a significant impact on the firms's ability to conduct its business in a competitive manner. It makes sense to hedge such pricing risk by purchasing a forward or futures contract to buy a specific ~~quantify~~ quatity of that inputs at a fixed cost, which can be determined in advance.

2. Interest Rate Risk - The goal of hedging interest rate risk is to control the firm's net exposure (asset or liability) to unfavorable interest rate fluctuations.
Hedging ~~int~~ instrument - Interest rate swaps (or swaptions) may be used to protect a firm againts losses. It may help a firm to minimize its borrowing costs.

7. The objectives for it's risk management process should be set before engaging in risk mangement. The objective ~~sho~~ in terms of risk and return. Without clear goals determined and accepted by by the ~~firms~~ board of directors, management is likely to engage in inconsistent, costly activities to hedge an arbitrary set of risks. This brings us the key role that board of directors play and how the

board should be constituted for risk management to be effective.

8. The various committees associated with risk governance and their respective responsibilities are:

1) Risk Advisory Director - it is recommended to have an independent risk advisory director - a board member who intimately understands the risk factors of a given industry and can advise the board on specialized risk exposures. The responsibility they carry are individual should attend risk commitee and audit committee meeting to provide industry-specific guidance. Overall, the role involves educating members on best practices in both corporate governance and risk management.

2) Risk Management Commitee - is responsible for setting the firm's risk appetite and independently monitoring ongoing risk management. Members will maintain contact with both internal and external auditors to ensure compliance with all relevant policies. (eg., ~~regulators~~ regulations and internal risk limits). This committee is also ~~to~~ charged with supervision of all known risks ~~and~~ of the firm and approving high-level risk decisions.

3) Compensation Committee - is independent of management. Its role is to discuss and approve the remuneration of key management personnel.

4) Audit Committee - are responsible for monitoring risk management procedures, tracking the progress of existing systems, and affirming the efficacy of the existing policies / systems. Another key role is to offer an opinion on the assumptions (i.e volatility, correlations, etc.) used in internal risk estimation.

9) Cost and benefits of an ERM program.

Cost ~~so~~ is divided into two categories:

i. Non-recurring (one-time or start-up) costs:
- Consultancy costs for setting up an ERM program.
- Hardware and software purchases.
- Training of in-house personnel.

ii. Recurring (ongoing) costs:
- Salaries & benefits of risk management staff.
- Hardware maintenance & upgrades and software license fees.
- Spend on intruments used to hedge or manage risks.

10) CRO risk management officer:-

- Providing overall leadership, vision, and direction of ERM.
- Integrated risk management framework
- Developing risk management policies
- Implementing a set of risk indicators and reports
- Allocation of economic capital
- Communicating the company's risk profile.

There ~~is~~ are substantial ambiguities with regards to where the CRO ~~st~~ stands in hierarchy between the board of directors and other executives, namely the CEO, CFO and COO. Mostly the CRO reports to the CFO or CEO but this can lead to friction and clashes. Though differing through various organizations, broadly, the CRO is the head of an independent risk function in an organization.