## Module 1 : Summary

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### Chapter 1

### Introduction to Risk Management

### 1.1 Understanding and Quantifying Risk

Risk can be used in many contexts in risk management and insurance and can have any of the following meanings:

- 1. The subject matter of an insurance policy, such as a structure, an auto fleet, or the possibility of a liability claim arising from an insured's activities;
- 2. The insurance applicant (the insured);
- 3. The possibility of bodily injury or property damage;
- 4. A cause of loss (or peril), such as fire, lightning, or explosion;
- 5. The variability associated with a future outcome.

Within the definition, there are always to elements: the *uncertainty of outcome* (what/when is the event) and the *possibility of negative outcome*.

It's important to note that possibility does not quantify risk: one needs to know the *probability* of the event in order to adequately quantify it. In contrast, possibility only dictates if an outcome may or may not occur.

#### 1.2 Risk Classification

In order to better understand and manage risks, organization typically categorize risks using one or more of following categories:

- 1. Pure and speculative risk;
- 2. Subjective and objective risk;
- 3. Diversifiable and nondiversifiable risk;
- 4. Quadrant of risk (hazard, operational, financial and strategic).

#### 1.2.1 Pure and Speculative Risk

A pure risk is a chance of a loss or no loss, but no chance of gain. For example, the fire of a fire loss: the building can burn of not burn. Either way, the owner of the building won't gain anything

from the risk. As they represent no opportunity for financial gain, pure risks are always undesirable.

In contrast, speculative risk involves a chance of gain. For example, venture capitalism is a speculative risk: it represents a financial risk which has enormous profit potential. Hence, this type of risk is desirable. Other examples are:

- Price risk;
  - Possible changes in material costs, for example.
- Credit risk;
- Financial investments.

The financial investment are usually categorized into four types of speculative risk:

- 1. Market risk;
  - Risk associated with the fluctuation in price of stocks and bonds.
- 2. Inflation risk;
- 3. Interest rate risk;
- 4. Liquidity risk.

#### 1.2.2 Subjective and Objective Risk

The differentiation between the two comes from the source of assessments regarding the risks: opinions (which are *subjective*) or facts (*objective*).

The closer an organization's subjective interpretation of risk is to an objective risk, the more effective its risk management will be.

Here are the reason why subjective and objective risk can differ substantially:

- 1. Familiarity and control;
- 2. Consequences over likelihood;
  - Either underrating the probability of a low probability event, of overstating the probability. In both cases, the assessment of the consequence over the likelihood is wrong.
- 3. Risk awareness;
  - Of course, if you're not aware that a risk exists, the subjective risk will be wrong.