Quadrants of Risk: Hazard, Operational, Financial, and Strategic

Although no consensus exists about how an organization should categorize its risks, one approach involves dividing them into risk quadrants:

- Hazard risks arise from property, liability, or personnel loss exposures and are generally the subject of insurance.
- Operational risks fall outside the hazard risk category and arise from people or a failure in processes, systems, or controls, including those involving information technology.
- Financial risks arise from the effect of market forces on financial assets or liabilities and include **market risk**, credit risk, **liquidity risk**, and price risk.
- Strategic risks arise from trends in the economy and society, including changes in the economic, political, and competitive environments, as well as from demographic shifts.

Market risk
Uncertainty about an investment's future value because of potential changes in the market for that type of investment.

Liquidity risk
The risk that an asset cannot be sold on short notice without incurring a loss.

Hazard and operational risks are classified as pure risks, and financial and strategic risks are classified as speculative risks.

The focus of the risk quadrants is different from the risk classifications previously discussed. Whereas the classifications of risk focus on some aspect of the risk itself, the four quadrants of risk focus on the risk source and who traditionally manages it. For example, the chief financial officer traditionally manages financial risk, and the risk manager traditionally manages hazard risk. Just as a particular risk can fall into more than one classification, a risk can also fall into multiple risk quadrants. For example, embezzlement of funds by an employee can be considered both a hazard risk, because it is an insurable pure risk, and an operational risk, because it involves a failure of controls. See the exhibit "Risk Quadrants."

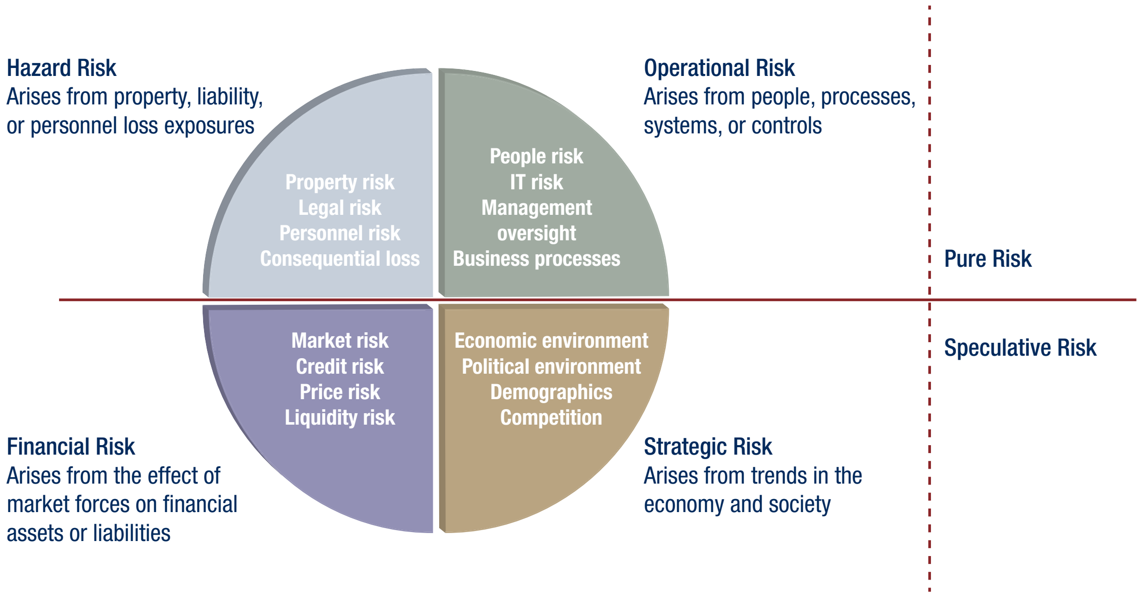
Organizations define types of risk differently. Some organizations consider legal risks as operational risk, and some may characterize certain hazard risks as operational risk. Financial institutions generally use the categories of market, credit, and operational risk (defined as all other risk, including hazard risk). Each organization should select categories that align with its objectives and processes.

Apply Your Knowledge

The New Company manufactures electronic consumer products. The company's manufacturing plant is highly automated and located in the United States. However, it purchases components from three companies in Asia. The majority of its sales are in the U.S., but European sales represent a growing percentage.

Describe the types of risk New Company would have in each of the four risk quadrants.

Risk Quadrants



Note: The above risk classifications are general and not meant to cover every risk faced by an organization. There can be overlap among the various categories. Each organization should develop risk classifications that best suit its need for assessing and treating risks.

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Feedback: In the hazard risk quadrant, New Company would have property damage risks to its plant and equipment resulting from fire, storms, or other events. It would also have risk of injury to its employees and liability risks associated with its products.

In the operational risk quadrant, New Company would have risks from employee turnover or the inability to find skilled employees. It would also have business process risk related to how it manages its supply chain and information technology risk related to its automated manufacturing process.

In the financial risk quadrant, New Company would have exchange rate risk related to its European sales. It would also have price risk for raw materials and supplies.

Strategic risks include competition, economic factors that could affect consumer demand, and the political risk arising from countries in which the company's component suppliers are located.

ENTERPRISE RISK MANAGEMENT

The concept of enterprise risk management (ERM) emerged in the 1990s.[13] Since the failure of large corporations such as Enron and WorldCom and the financial crisis of 2008, financial regulators in the United States and Europe adopted the ERM concept, and it is now an integral part of various regulations.

Traditional risk management is concerned with an organization's pure risk, primarily hazard risk. The concept of ERM was developed in recent years as a way to manage all of an organization's risks, including operational, financial, and strategic risk. In practice, there is no clear dividing line between risk management and ERM, with the terms often used interchangeably.

ERM Definitions

The evolving similarity of the concepts of risk management and ERM is demonstrated in the International Organization for Standardization (ISO) 2009 definition of risk management in ERM terms: "coordinated activities to direct and control an organization with regard to risk."[14] The ISO definition of risk as "the effect of uncertainty on objectives" also reflects an ERM approach to risk and risk management. There are many definitions of ERM, and the exhibit highlights a few that are widely used. See the exhibit "Definitions of ERM."

The various definitions of ERM all include the concept of managing all of an organization's risks to help an organization meet its objectives. This link between the management of an organization's risks and its objectives is a key driver in deciding how to assess and treat risks.

Theoretical Pillars of ERM

Whether the source of a risk is financial, hazardous, operational, or strategic, risks managed separately are not the same as they are when managed together. Three main theoretical concepts explain how ERM works:

- Interdependency
- Correlation
- Portfolio theory

The silo type of management that is typical of traditional risk management ignores any interdependencies and assumes that a financial risk is unrelated to a hazard risk. Events are statistically independent if the probability of one event occurring does not affect the probability of a second event occurring. However, the traditional assumption of independence may not always be valid. When it isn't valid, the assumption may result in an inefficient treatment of an organization's portfolio of risks. For example, mortgage loans in different geographical regions may seem independent. However, the 2008 financial crisis revealed that there was actually a significant interdependency.