

# Study of Risk Management and Derivatives Used by Indian Companies

**Vedant Anil Devre**

The Byramjee Jeejeebhoy College of Commerce, Mumbai

**Abstract:** Risk refers to the possibility that actual outcomes may differ from expected outcomes. In business, it generally means the chance of financial loss or uncertainty affecting company performance

**Keywords:** Risk.

## I. INTRODUCTION

### Introduction to Risk Management

#### Meaning of Risk

Risk refers to the possibility that actual outcomes may differ from expected outcomes. In business, it generally means the chance of financial loss or uncertainty affecting company performance.

#### Meaning of Risk Management

Risk management is the process of identifying, assessing, and controlling risks that may affect a company's financial stability and operations.

#### Why Risk Exists in Businesses

Companies operate in uncertain environments where factors like market fluctuations, interest rate changes, foreign exchange movements, and commodity price changes create risks.

#### Objectives of Risk Management

- Protect company assets and profits
- Reduce financial uncertainty
- Ensure stable cash flows
- Improve decision making

#### Process of Risk Management

The basic steps include:

- Identifying risks
- Measuring or assessing risks
- Selecting appropriate risk management techniques
- Monitoring and controlling risks

#### Role of Financial Instruments in Risk Management

Companies often use financial instruments such as derivatives (futures, options, swaps, forwards) to hedge against financial risks.

#### Relevance for Indian Companies

With globalization and volatile markets, Indian companies increasingly rely on structured risk management practices and derivative instruments to manage financial exposure.



## **Overview of Financial Risks Faced by Indian Companies**

### **Foreign Exchange Risk**

Indian companies involved in exports, imports, or foreign borrowing face risk due to fluctuations in exchange rates (e.g., INR vs USD). Currency changes can affect revenues, costs, and profits.

### **Interest Rate Risk**

Companies that borrow money through loans or bonds face risk when interest rates rise or fall. Changes in interest rates can increase borrowing costs or affect investment returns.

### **Commodity Price Risk**

Firms that depend on raw materials such as oil, metals, or agricultural products face price volatility. Sudden changes in commodity prices can significantly affect production costs.

### **Commodity Price Risk**

Firms that depend on raw materials such as oil, metals, or agricultural products face price volatility. Sudden changes in commodity prices can significantly affect production costs.

### **Equity Price Risk**

Companies that invest in stock markets or hold equity securities may face losses due to fluctuations in share prices.

### **Liquidity Risk**

This occurs when a company cannot meet its short-term financial obligations due to lack of cash or liquid assets.

### **Credit Risk**

The risk that customers or counterparties fail to make required payments, leading to financial losses for the company.

## **Importance of Risk Management in Corporate Finance**

### **Protects Company Profits**

Risk management helps companies reduce potential financial losses caused by market fluctuations, interest rates, exchange rates, and commodity prices.

### **Ensures Financial Stability**

By managing risks effectively, companies can maintain stable cash flows and avoid sudden financial shocks.

### **Improves Decision Making**

Proper risk analysis allows management to make better financial and investment decisions.

### **Protects Shareholder Value**

Managing risks helps preserve the company's value and protects the interests of shareholders and investors.

### **Supports Long-Term Planning**

When risks are identified and controlled, companies can plan long-term strategies with greater confidence.

## **Encourages Efficient Use of Financial Instruments**

Risk management allows companies to use tools like **derivatives, hedging strategies, and insurance** to manage financial exposure.

### **Concept of Derivatives**

#### **Meaning of Derivatives**

A derivative is a financial instrument whose value is derived from the value of an underlying asset such as stocks, commodities, currencies, interest rates, or market indices.

#### **Underlying Asset**

The underlying asset determines the price of the derivative. Examples include equity shares, foreign currencies, commodities, and bonds.

#### **Purpose of Derivatives**

Derivatives are mainly used to **manage financial risks (hedging)**, but they can also be used for **speculation and arbitrage**.



### **How Derivatives Work**

The value of a derivative changes when the price of the underlying asset changes.

### **Common Types of Derivatives**

The main derivative instruments include **forwards, futures, options, and swaps**.

### **Use by Companies**

Companies use derivatives to **protect themselves against risks such as exchange rate fluctuations, interest rate changes, and commodity price volatility**.

### **Types of Derivative Instruments**

#### **Forward Contracts**

A forward contract is a private agreement between two parties to buy or sell an asset at a predetermined price on a future date. These contracts are usually customized and traded over-the-counter (OTC).

#### **Futures Contracts**

Futures are standardized contracts traded on organized exchanges (such as NSE or BSE) where two parties agree to buy or sell an asset at a fixed price on a future date.

#### **Options Contracts**

An option gives the buyer the **right but not the obligation** to buy or sell an asset at a predetermined price before or on a specified date. There are two types: **call options** and **put options**.

#### **Swaps**

A swap is a contract where two parties exchange cash flows or financial obligations, commonly used for interest rate swaps or currency swaps.

### **Regulatory Framework for Derivatives in India**

#### **Meaning of Regulatory Framework**

The regulatory framework refers to the rules and guidelines that govern the trading and use of derivative instruments in India to ensure transparency, fairness, and investor protection.

#### **Role of SEBI**

The Securities and Exchange Board of India (SEBI) is the primary regulator of the derivatives market in India. It sets regulations for derivative trading, supervises stock exchanges, and protects investors.

#### **Role of RBI**

The Reserve Bank of India (RBI) regulates derivatives related to foreign exchange and interest rates, especially those used by banks and financial institutions.

#### **Stock Exchanges**

Derivatives trading in India mainly takes place on exchanges like National Stock Exchange of India (NSE) and Bombay Stock Exchange (BSE), which operate under SEBI regulations.

#### **Standardization and Transparency**

Exchange-traded derivatives are standardized contracts with proper clearing and settlement mechanisms to reduce default risk.

#### **Clearing Corporations**

Clearing corporations act as intermediaries between buyers and sellers, ensuring smooth settlement and reducing counterparty risk.



### **Role of SEBI and RBI in Derivatives Regulation**

#### **Role of Securities and Exchange Board of India (SEBI)**

SEBI regulates and supervises **exchange-traded derivatives markets** in India. It sets rules for derivative trading, ensures transparency in the market, protects investors, and monitors stock exchanges where derivatives are traded. SEBI also approves new derivative products and establishes risk management guidelines for exchanges.

#### **Role of Reserve Bank of India (RBI)**

RBI regulates **currency and interest rate derivatives**, particularly those used by banks and financial institutions. It issues guidelines for foreign exchange derivatives and oversees risk management practices related to currency and interest rate exposure.

#### **Coordination Between SEBI and RBI**

Both regulators work together to maintain **financial stability, proper market functioning, and risk control** in the derivatives market in India.

### **Derivative Markets in India (NSE and BSE)**

#### **Introduction to Derivative Markets in India**

Derivative markets in India allow investors and companies to trade financial contracts whose value depends on an underlying asset such as stocks, indices, currencies, or commodities.

#### **Role of National Stock Exchange of India (NSE)**

NSE is the **largest derivatives exchange in India** and one of the biggest in the world by trading volume. It offers derivative products such as **index futures, stock futures, index options, and stock options**.

#### **Role of Bombay Stock Exchange (BSE)**

BSE also provides a derivatives trading platform where investors can trade **equity derivatives and index derivatives**. It contributes to market liquidity and competition in the derivatives segment.

#### **Types of Derivatives Traded on Exchanges**

The main derivatives traded on these exchanges include **futures and options on stock indices, individual stocks, and currencies**.

#### **Importance for Indian Companies and Investors**

These markets help companies and investors **hedge financial risks, manage price fluctuations, and improve price discovery in financial markets**.

### **Hedging Strategies Used by Indian Companies**

#### **Meaning of Hedging**

Hedging is a risk management strategy used by companies to reduce potential losses caused by price fluctuations in financial markets.

#### **Purpose of Hedging**

Companies hedge to protect themselves from risks related to exchange rates, interest rates, and commodity prices.

#### **Use of Derivatives**

Indian companies commonly use **futures, options, forwards, and swaps** to hedge financial exposures.

#### **Example**

Export-oriented companies hedge foreign currency receivables to protect against adverse exchange rate movements.

### **Interest Rate Risk Management Using Derivatives**

#### **Interest Rate Risk**

This risk arises when changes in interest rates affect borrowing costs or investment returns.



### **Use of Interest Rate Derivatives**

Companies use derivatives such as **interest rate swaps, futures, and options** to manage this risk.

#### **Objective**

The main goal is to stabilize borrowing costs and protect companies from sudden increases in interest rates.

### **Foreign Exchange Risk Management Using Derivatives**

#### **Foreign Exchange Risk**

Companies involved in international trade face risks due to fluctuations in currency exchange rates.

#### **Use of Currency Derivatives**

Firms use **currency forwards, futures, options, and swaps** to hedge foreign exchange exposure.

#### **Benefit**

These instruments help companies protect profits and maintain stable cash flows in international transactions.

### **Commodity Price Risk Management**

#### **Commodity Price Risk**

Companies dependent on raw materials such as oil, metals, or agricultural products face price volatility.

#### **Use of Commodity Derivatives**

Firms hedge commodity risks using **commodity futures and options** in commodity markets.

#### **Purpose**

This helps companies control production costs and reduce uncertainty in input prices.

### **Case Studies of Indian Companies Using Derivatives**

#### **Use in Real Businesses**

Many large Indian companies use derivatives to manage financial risks.

#### **Examples**

Companies in sectors like **oil, aviation, IT, and manufacturing** use derivatives for currency, interest rate, and commodity risk management.

#### **Importance**

Case studies demonstrate how derivatives help companies maintain financial stability in volatile markets.

### **Advantages of Using Derivatives**

#### **Risk Management**

Derivatives help companies reduce exposure to financial risks.

#### **Price Stability**

They help stabilize costs and revenues by locking in prices.

#### **Improved Financial Planning**

Companies can plan budgets and investments more effectively.

#### **Market Efficiency**

Derivatives improve price discovery and liquidity in financial markets.

### **Risks and Limitations of Derivatives**

#### **Market Risk**

Incorrect predictions of market movements can lead to losses.

#### **Complexity**

Derivative instruments can be complex and difficult to manage.



### **Counterparty Risk**

In some contracts, one party may fail to fulfill its obligations.

### **Misuse for Speculation**

Excessive speculation instead of hedging can increase financial risk.

### **Accounting Treatment of Derivatives**

#### **Recognition in Financial Statements**

Derivative contracts must be recognized and measured in financial statements according to accounting standards.

#### **Fair Value Measurement**

Derivatives are usually measured at **fair value**.

#### **Hedge Accounting**

Special accounting treatment is applied when derivatives are used for hedging purposes.

### **Disclosure Requirements in Financial Statements**

#### **Transparency**

Companies must disclose information about their derivative transactions in financial statements.

#### **Details Provided**

Disclosures include the **type of derivatives used, purpose of hedging, and associated risks**.

#### **Importance**

This helps investors understand how companies manage financial risks.

### **Impact of Derivatives on Financial Performance**

#### **Risk Reduction**

Proper use of derivatives can reduce financial volatility.

#### **Stability of Earnings**

Hedging helps maintain stable profits and cash flows.

#### **Improved Financial Management**

Companies can manage financial exposures more efficiently.

### **Challenges in Risk Management for Indian Corporations**

#### **Market Volatility**

Rapid changes in financial markets increase risk management difficulties.

#### **Complex Financial Instruments**

Some companies lack expertise to manage complex derivatives.

#### **Regulatory Compliance**

Firms must comply with regulatory requirements while managing risks.

#### **Cost of Hedging**

Hedging strategies can involve additional financial costs.

### **Recent Developments in the Indian Derivatives Market**

#### **Market Growth**

India's derivatives market has grown significantly in trading volume and participation.

#### **New Financial Products**

Exchanges regularly introduce new derivative instruments.

#### **Improved Technology and Regulation**

Better trading systems and regulatory frameworks have increased market transparency and efficiency.



## **II. CONCLUSION AND RECOMMENDATIONS**

### **Summary of Study**

Risk management and derivatives play an important role in helping Indian companies manage financial uncertainties.

### **Importance for Businesses**

Effective use of derivatives helps protect companies from market fluctuations and improves financial stability.

### **Recommendations**

Companies should adopt proper risk management policies, use derivatives responsibly, and ensure compliance with regulatory guidelines

