Types of Financial Risk

Activity 1 — Describing Types of Financial Risk

Questions	Answers
1. Output price risk	A. The risk that a security's future value will decline because of changes in interest rates.
2. Liquidity risk	B. The uncertainty of the price of the resources that are used to produce an organization's product.
3. Counterparty risk	C. Uncertainty about an investment's future value because of potential changes in the market for that type of investment.
4. Interest rate risk	D. The risk that an asset cannot be sold on short notice without incurring a loss.
5. Credit risk	E. The risk that customers or other creditors will fail to make promised payments as they come due.
6. Exchange rate risk	F. The potential for a change in revenue or cost because of an increase or a decrease in the price of a product or an input.
7. Market risk	G. The uncertainty of what price the organization can charge for its product.
8. Price risk	H. The risk that the other party to an agreement will default.
9. Input price risk	I. Uncertainty about an investment's value because of potential changes in the exchange rate between currencies.

Answers to Activity 1 — Describing Types of Financial Risk

Questions	Answers
1. Output price risk	G. The uncertainty of what price the organization can charge for its product.
2. Liquidity risk	D. The risk that an asset cannot be sold on short notice without incurring a loss.
3. Counterparty risk	H. The risk that the other party to an agreement will default.
4. Interest rate risk	A. The risk that a security's future value will decline because of changes in interest rates.
5. Credit risk	E. The risk that customers or other creditors will fail to make promised payments as they come due.
6. Exchange rate risk	I. Uncertainty about an investment's value because of potential changes in the exchange rate between currencies.
7. Market risk	C. Uncertainty about an investment's future value because of potential changes in the market for that type of investment.
8. Price risk	F. The potential for a change in revenue or cost because of an increase or a decrease in the price of a product or an input.
9. Input price risk	B. The uncertainty of the price of the resources that are used to produce an organization's product.

Transferring Financial Risk

Educational Objective (EO)

Given information on an organization's financial risk, recommend ways to transfer the risk.

Instructions

Activity 1 — Determining Transfer of Financial Risk Case Study

Large Group Discussion

Divide participants into two groups and ask participants to read the scenario in **Activity 1— Determining Transfer of Financial Risk Case Study**. Ask participants these questions to determine recommendations on ways to transfer FPS's financial risk:

1. How does being able to obtain long-term financing affect FPS' interest rate risk?
2. What happens to FPS's interest rate risk as a result of not having to refinance the loan when it expires?
3. What is a major benefit of involving an SPV in a securitization transaction?
4. What would investors need to consider if FPS directly securitized its income-producing assets without using an SPV as an intermediary?
5. Why is analyzing the FPS's overall credit risk complex?
6. How does an SPV affect the credit risk?

Write participant responses on the flipchart or whiteboard for review.

Debrief:
Answers to the questions:

1. If FPS had only been able to obtain short-term financing at a reasonable interest rate, it would have been concerned that when the time came to refinance the debt, the interest rate could rise, creating an expense that FPS could not afford.
2. Because, in fact, FPS does not have to refinance the loan when it expires, this exposure to interest rate risk is lowered.
3. A major benefit of involving an SPV in a securitization transaction is that investors can decide whether to invest in the securities based solely on risk presented by the income-producing assets, or accounts receivable, held as collateral by the SPV.
4. If FPS directly securitized its income-producing assets without using an SPV as an intermediary, investors would need to consider not only the risks presented by the income-producing assets, but also the overall credit risk of FPS.
5. Analyzing overall credit risk is complex because FPS may hold many different types of assets and incur many different types of liabilities. Even expert investors have difficulty accurately analyzing such credit risk.
6. An SPV reduces this associated credit risk; conversely, not having an SPV increases this associated credit risk.

Activity 1 — Determining Transferring Financial Risk Case Study

Freckles Paint Store (FPS) must raise cash quickly to meet current financial obligations. Its management wants to raise cash using two methods. The first is to take out a loan, which it expects to pay off early, as it is able to obtain long-term financing at a reasonable interest rate. The second method of raising cash involves converting past sales into cash. Past sales have resulted in a large accounts receivable account, which contains the amounts due from customers that have not yet paid for the paint they bought. Several investors have expressed an interest in paying cash for FPS's accounts receivable; however, because of FPS's weak financial condition, no intermediary is willing to act as a special purpose vehicle (SPV) for the investors.

Assignment 10

Capital Market Risk Financing Products

Activity 1—Describing Capital Market Risk Financing Products

Questions	Answers
1. The main product sold in this type of market is long-term financial instruments.	
2. This type of risk is often financed in capital markets because the large accumulation of losses from a single event is too large for traditional risk financing methods.	
3. This is the process of creating a marketable investment security based on a financial transaction's expected cash flows.	
4. This is a generic term for a financial contract that derives its value from the value of another asset.	
5. This type of "vehicle" is a facility established for the purpose of purchasing income-producing assets from an organization, holding title to them, and then using those assets to collateralize securities that will be sold to investors.	
6. The value of this marketable financial instrument is based on the cash flows that arise from the transfer of insurable risks.	
7. Because insurance-linked securities have low correlation with other asset classes such as stocks and bonds, they are very useful for investors that want to do this with their investment portfolios.	
8. This type of bond suspends its normal interest and principal payments if the	

losses specified in the bond contract take place.	
9. The value of this category of forwards, options and swaps contracts increases as specified insurable losses increase, thereby offsetting those insurable losses.	
10. This pre-loss agreement establishes terms for an organization to receive a capital injection in the form of debt or equity in the event it suffers a major loss.	
11. This type of option gives the holder the right to sell a set amount of the underlying security at any time within a specified period.	

Answers for Activity 1—Describing Capital Market Risk Financing Products

Questions	**Answers**
1. The main product sold in this type of market is long-term financial instruments.	What is a capital market?
2. This type of risk is often financed in capital markets because the large accumulation of losses from a single event is too large for traditional risk financing methods.	What is catastrophe risk?
3. This is the process of creating a marketable investment security based on a financial transaction's expected cash flows.	What is securitization?
4. This is a generic term for a financial contract that derives its value from the value of another asset.	What is a derivative?
5. This type of "vehicle" is a facility established for the purpose of purchasing income-producing assets from an organization, holding title to them, and then using those assets to collateralize securities that will be sold to investors.	What is a special purpose vehicle (SPV)?
6. The value of this marketable financial instrument is based on the cash flows that arise from the transfer of insurable risks.	What is an insurance-linked security?
7. Because insurance-linked securities have low correlation with other asset classes such as stocks and bonds, they are very useful for investors that want to do this with their investment portfolios.	What is diversifying?
8. This type of bond suspends its normal interest and principal payments if the losses specified in the bond contract	What is a catastrophe bond?

take place.	
9. The value of this category of forwards, options and swaps contracts increases as specified insurable losses increase, thereby offsetting those insurable losses.	What is an insurance derivative?
10. This pre-loss agreement establishes terms for an organization to receive a capital injection in the form of debt or equity in the event it suffers a major loss.	What is a contingent capital arrangement?
11. This type of option gives the holder the right to sell a set amount of the underlying security at any time within a specified period.	What is a put option?

Insurance-Linked Securities

Activity 1 — Describing Insurance-Linked Securities

Questions	Answers
1. These were developed, in part, in response to the limited availability and affordability of catastrophe reinsurance.	
2. They provide reports on the creditworthiness of many insurance-linked securities.	
3. What information does the SPV use to determine whether a loss threshold is met?	
4. What are the disadvantages of insurance securitizations?	
5. What is the financial instrument whose value is primarily driven by insurance and/or reinsurance loss events?	
6. What insurance securitization advantage provides organizations with an alternative to traditional insurance and reinsurance?	
7. What are the catastrophe losses that trigger payment under a catastrophe bond can be based on one of these?	
8. What is basis risk?	
9. What is used to measure the frequency and severity probabilities that determine the standards used to measure the catastrophic risk embedded in these bonds?	

Answers to Activity 1 — Describing Insurance-Linked Securities

Questions	**Answers**
1. These were developed, in part, in response to the limited availability and affordability of catastrophe reinsurance.	Catastrophe bonds
2. They provide reports on the creditworthiness of many insurance-linked securities.	Rating agencies
3. What information does the SPV use to determine whether a loss threshold is met?	The organization's actual losses or an index of insured losses incurred by a group of insurers
4. What are the disadvantages of insurance securitizations?	• Exposure to the Volatility of the Market's Demand • Opportunity Cost of Collateralized Assets • Transaction Costs • Basis Risk
5. What is the financial instrument whose value is primarily driven by insurance and/or reinsurance loss events?	Insurance-linked security
6. What insurance securitization advantage provides organizations with an alternative to traditional insurance and reinsurance?	Create additional risk transfer capacity
7. What are the catastrophe losses that trigger payment under a catastrophe bond can be based on one of these?	• Aggregate catastrophe losses over a defined period of time or • The occurrence of a single catastrophic event
8. What is basis risk?	The risk that the amount the organization receives to offset its losses may be greater than or less than its actual losses.
9. What is used to measure the frequency and severity probabilities that determine the standards used to measure the catastrophic risk embedded in these bonds?	Computer models

Activity 1 — Describing Contingent Capital Arrangements

Questions	Answers
1. This is an arrangement in which a bank or another financial institution agrees to provide a loan to an organization in the event the organization suffers a loss.	
2. Describe a surplus note.	
3. What are the disadvantages of contingent capital arrangements?	
4. What type of arrangement is an agreement that is entered into before losses occur that enables an organization to raise cash by selling stock or issuing debt at prearranged terms following a loss that exceeds a certain threshold?	
5. What is a benefit of surplus notes?	
6. What type of notes are surplus notes that have been designed so that an insurer, at its option, can immediately obtain funds by issuing notes at a pre-agreed rate of interest?	
7. What are the advantages of contingent capital arrangements?	
8. What types of put options are other ways for an insurer or a noninsurance organization to raise funds in the event of a catastrophic loss?	
9. A standby credit facility entails loss [blank], while insurance entails loss [blank].	

Answers to Activity 1 — Describing Contingent Capital Arrangements

Questions	**Answers**
1. This is an arrangement in which a bank or another financial institution agrees to provide a loan to an organization in the event the organization suffers a loss.	Standby credit facility
2. Describe a surplus note.	A type of unsecured debt instrument, issued only by insurers, that has characteristics of both conventional equity and debt securities and is classified as policyholders' surplus rather than as a liability on the insurer's statutory balance sheet.
3. What are the disadvantages of contingent capital arrangements?	• Funds received from a standby credit facility or contingent surplus note for losses are paid in the form of loans, not equity, and must be paid back to the lender with interest. • The amount of an organization's equity increases when a catastrophe equity put option is exercised, thereby reducing the existing shareholders' percentage of ownership. This dilution may also come at a crucial time in the management of the organization (that is, after a catastrophe).
4. What type of arrangement is an agreement that is entered into before losses occur that enables an organization to raise cash by selling stock or issuing debt at prearranged terms following a loss that exceeds a certain threshold?	Contingent capital arrangement
5. What is a benefit of surplus notes?	They increase an insurer's assets without increasing its liabilities.
6. What type of notes are surplus notes that have been designed so that an insurer, at its option, can immediately obtain funds by issuing notes at a pre-agreed rate of interest?	Contingent surplus notes

Questions	**Answers**
7. What are the advantages of contingent capital arrangements?	• The funds they make available to an organization cost less than funds made available by insurance. • They allow an organization to obtain capital infusion at a predetermined price.
8. What types of put options are other ways for an insurer or a noninsurance organization to raise funds in the event of a catastrophic loss?	Catastrophe equity put options
9. A standby credit facility entails loss <u>[blank]</u>, while insurance entails loss <u>[blank].</u>	A standby credit facility entails loss <u>retention</u>, while insurance entails loss <u>transfer</u>.