

South Tuen Mun Government Secondary School
Business, Accounting and Financial Studies
Risk Management WS# 1

Name: _____

Class: _____ No(_____)

Lucky Limited is a small trading firm with 20 employees. Its main business is importing electronic components from Japan and re-exporting them to the mainland of China. It has five sales managers who are required to travel to Japan and the Mainland frequently. Lucky usually buys electronic components in bulk to obtain large discounts. It may take up to six months for the company to find buyers from the Mainland. Hence, the company may keep its inventory for a few months before it can re-export the goods.

1. What types of risk does Lucky Limited face?

2. What types of risk management strategies can the company use to protect against a loss of inventory from a fire and a burglary?

3. What types of insurance can the company consider to protect against the different types of risks mentioned in Question 1?

4. Explain why some insurance companies do not provide insurance protection against property losses from a terrorist attack.

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Financial Management challenge (P186-187)

5. a) What types of risk does Honda Department Store face based on the above information?

5b) Do department stores face other kinds of risks?

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9. Use an example to explain the difference between loss frequency and loss severity.

10. Explain the meaning of pure risk and speculative risk. Give one example for each type of risk.

11. Explain whether the following risks for a bus company belong to pure risk or speculative risk:

a) The risk that the company's buses may damage other motor vehicles in a traffic accident

b) The risk that oil prices may increase sharply

12. Give two examples each of the personal risks and property risks that a restaurant may face.

13. Suggest two risk management strategies that can reduce loss frequency and two risk management strategies that can reduce loss severity.

14. Explain two risk management strategies that a firm may use to lower the risk of bad debts. Give one example for each strategy.

15. Suggest two examples each of insurable risks and non-insurable risks for a boutique.

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16. Give two reasons why risk assumption is a common strategy for drug manufacturers to manage the risk of a drug development failure.

17. Jimmy: 'Among the four risk management strategies, risk transfer is the best one as this strategy can completely eliminate risks.' Do you agree with Jimmy? Explain.

18. Explain whether the following owners can acquire insurance protection against the risks they face.

a) A consumer electronics retailer worries that he may have to sell his inventory at a huge discount and take a loss if the manufacturers launch new models.

b) A sushi shop owner is concerned about the possibility that his seafood may spoil due to an unexpected suspension of electricity.

c) A teahouse owner wants to buy insurance to protect the teahouse from a fall in revenue if another teahouse opens next to it.

19. Suggest two insurance products that can be used by a business to transfer each of the following types of risk to insurance companies:

a) Personal risk

b) Property risk

c) Liability risk

- 1** Lucky Limited faces the risk of burglary, fire, appreciation of the Japanese yen or depreciation of the renminbi, fall in demand, damage to goods during shipping, and injury or death of sales managers during business trips.
 - 2** The company may use risk reduction or risk transfer to protect itself against a loss of inventory from a fire or a burglary. For risk reduction, the company may install an automatic sprinkler system and an anti-burglary alarm in its warehouse. For risk transfer, the company may buy fire insurance and burglary insurance for its warehouse.
 - 3** The company can buy the following types of insurance:
 - Fire risk — fire insurance
 - Burglary risk — burglary insurance
 - Risk of damage of goods during shipping — marine insurance
 - Risk of injury or death of sales managers during business trips — employees' compensation insurance and travel insurance
 - 4** This is because a terrorist attack may result in widespread damage. If insurance companies provide insurance protection against property losses from a terrorist attack, they may suffer huge losses if the attack really occurs.
- 5a** Risks faced by Honda Department Store:
- The firm may experience a drastic fall in sales if the economy turns poor.
 - VIP cardholders who purchase on credit may default on payment.
 - If the Japanese yen appreciates against the Hong Kong dollar, the store will have to pay more in Hong Kong dollars for its imports from Japan.
 - The goods imported from Japan may be damaged during shipping.
 - If the market interest rate increases, the store will have to pay a higher interest expense.
- 5b** Other risks commonly faced by department stores:
- Shoplifting, burglary and robbery
 - Fire
 - Damage to premises or inventory by a typhoon
 - Employee injuries at work
 - Customers injuries during shopping

- 6** The risks mentioned in Question 1 will have the following effects on the store:
- Loss of property, e.g., money, inventory, fixed assets
 - Increase in operating costs, e.g., purchasing cost of goods, interest expense
 - Liable for compensation, e.g., the store may have to provide compensation to injured employees and customers
 - Loss of profits, e.g., the store may be closed temporarily after a fire
- 7** Danny may use the following strategies to deal with the risks:
- The store may choose not to engage in some activities in order to avoid the risks. For example, it may stop accepting purchases on credit to avoid the risk of default by VIP cardholders; it may also stop importing products directly from Japan to avoid the risk of damage during shipping.
 - The store may try to reduce the risks. For example, it may increase the variety of its goods in order to broaden its customer base. This can reduce the decrease in sales during an economic downturn. The store may also install equipment to reduce the risk of shoplifting and fire. Moreover, the store may provide more safety training to employees to reduce their risk of injury.
 - The store may buy insurance to protect against the risks. For example, it may buy insurance to cover losses or damages of property. It may also buy insurance to protect itself against compensation claims from injured employees and customers.
 - To reduce the risk that the Japanese yen may appreciate, the firm may buy a certain amount of yen in advanced.
 - The store may choose to do nothing if the risks are small or the risks cannot be reduced.
- 8** The store can use insurance to protect itself against most of the risks mentioned above. However, some risks normally cannot be insured against. For example, a firm cannot buy insurance against the decrease in sales as a result of an economic downturn. Moreover, insurance companies normally will not insure against fluctuations in exchange rates and interest rates.
- 9** Loss frequency and loss severity measure the two aspects of risk. Loss frequency measures the number of times a loss occurs over a period of time while loss severity measures the magnitude of the loss. For example, when we assess a department store's burglary risk, we consider how frequent a burglary might occur as well as the expected loss should a burglary occur.
(Any other reasonable examples)
- 10** Pure risk refers to risks that only involve the possibility of loss or no loss. Examples of pure risk include the risk of fire, death of employees, and law suits against a firm.

Speculative risk refers to risks that involve both the possibilities of loss or gain. Examples of speculative risk include the risk of gain or loss when a firm develops a new product, and the risk of gain or loss of a firm's foreign investment due to fluctuations in exchange rates. (Any other reasonable examples)

- 11** (a) Pure risk. This is because the risk only involves the possibility of loss or no loss.
- (b) Speculative risk. This is because the risk involves both the possibilities of loss or gain. If oil prices fall, the bus company will gain.

12 Examples of personal risks that a restaurant may face include:

- A chef gets injured when he is cooking in the restaurant's kitchen.
- A waitress gets sick and applies for leave.

(Any other reasonable answer)

Examples of property risks that a restaurant may face include:

- The restaurant's facilities (e.g., tables, chairs, kitchen) are destroyed by fire.
- Cash in the restaurant's cashbox is stolen.

(Any other reasonable answer)

13 Risk management strategies that can reduce loss frequency:

- Risk avoidance — aims to reduce loss frequency by not engaging in activities which would cause loss.
- Risk reduction — some risk reduction measures can prevent losses from happening (i.e., loss prevention measures) and thereby help reduce loss frequency.

Risk management strategies that can reduce loss severity:

- Risk reduction — some risk reduction measures can reduce damage once an undesirable event occurs (i.e., loss reduction measures) and thereby help reduce loss severity.
- Risk transfer — if a firm buys insurance, loss severity can be reduced as the firm receives financial compensation when an undesirable event occurs.

14 Risk management strategies to lower the risk of bad debts:

- Risk avoidance — a firm can avoid the risk of bad debts by not granting credit to customers that are likely to default (e.g., customers that cannot meet certain credit standards).
- Risk reduction — a firm can employ a collection agency to help collect overdue accounts receivable. It may also shorten the credit period or raise the cash discount.
- Risk transfer — a firm can buy credit insurance to protect itself against losses from non-payment of trade debtors. The firm will receive compensation from the insurance company when a debtor defaults.

(Any two of the above)

****** If an insurance company insures against speculative risks, which involve both the possibilities of gain or loss, the insured will be guaranteed to gain from speculation. Therefore, speculative risks are normally non-insurable.

- 15** Insurable risks for a boutique: risk of fire, burglary, employee theft, injury to salespeople (Any two or other reasonable example)

Non-insurable risks for a boutique: risk of fall in sales due to increased competition, damage from hangers (Any two or other reasonable example)

- 16** Risk assumption is normally employed when there is no other way of managing the risk. Drug manufacturers commonly employ risk assumption to manage the risk of a drug development failure because:
- There is a possibility of success of a new drug. Therefore, drug manufacturers face a speculative risk, which is non-insurable.
 - Such risk cannot be avoided because drug manufacturers have to keep developing new drugs. They have no choice but to take the risk. (Although such a risk cannot be completely avoided, drug manufacturers may avoid engaging in highly risky projects.)
- (Any other reasonable answer)

- 17** No. The reasons include:
- Risk transfer may be unable to completely eliminate a risk. For example, if a firm buys insufficient insurance coverage, it may have to bear some losses.
 - Risk transfer can only provide financial compensation. However, some losses which are permanent cannot be recovered, such as the death of an employee. Hence, in some cases, it is better to prevent losses from occurring.
 - Risk transfer measures involve costs. The costs of implementing risk transfer measures may be higher than the benefits.
 - Risk transfer may be unavailable because not all types of risk are insurable.

- 18** (a) No, because the risk is a speculative risk.
(b) Yes, because the risk is a pure risk and is uncontrollable by the sushi shop.
(c) No, because the risk is a speculative risk.

- 19** (a) Life insurance for employees and partners, medical insurance
(b) Fire insurance, burglary insurance, fidelity guarantee insurance, motor insurance, marine insurance (Any two)
(c) Public liability insurance, product liability insurance, employees' compensation insurance, third party insurance (Any two)

Factors contributing to the liquidation of U-Right: p.195

1 U-Right faced the following risks:

- The company expanded rapidly before its bankruptcy. The expansion put great pressure on its cash flows because the company's cash inflows from operations could not support its expansion. The problems became more severe when the economy turned poor during the financial tsunami in 2008. Hence, it had a high liquidity risk.
- The gross profit margin of the company fell significantly from 2005 to 2008. This is because the company faced fierce competition and its rapid expansion was supported by a low-price strategy. Hence, it had a high risk of falling profitability.
- The company relied very much on debt financing for its business expansion. This increased its risk of bankruptcy, especially during bad times.

2 The major factors contributing to the company's failure include:

- Over-expansion: The company expanded too quickly and underestimated the capital needed for the expansion. As a result, it had to rely heavily on debt financing.
- Excessive use of debt financing: If the company had used more equity financing rather than debt financing, it might have been able to survive during the financial tsunami. This is because equity financing would not increase its financial burden the way debt financing did.

p.196 Additional information

We can classify the four risk control strategies into two types: pre-event measures and post-event measures. Pre-event measures help prevent undesirable events from happening (i.e., reducing loss frequency), while post-event measures provide compensation or remedies after undesirable events have happened. Post-event measures usually help reduce loss severity (except for risk assumption).

- Risk avoidance belongs to pre-event measures as it can prevent undesirable events from happening.
- Risk assumption and risk transfer belong to post-event measures as they take effect after undesirable events have happened.
- Risk reduction can be either pre-event or post-event measures, depending on the nature of the measures. Loss prevention measures are regarded as pre-event measures, while loss reduction measures are regarded as post-event measures.

p.197 Additional information

Risk assumption can be further divided into active risk assumption or passive risk assumption.

Active risk assumption refers to a situation where management is aware of the risk but decides not to implement measures to reduce or prevent the loss after considering the available methods. In other words, active risk assumption is planned.

If management is unaware of the risk and does nothing to reduce or prevent the loss, this is called passive risk assumption. In other words, passive risk assumption is caused by ignorance and is unplanned.

Additional information

Sometimes a risk reduction measure can reduce both loss frequency and loss severity. Teachers may illustrate this using regular exercise as an example. By exercising regularly, a person can maintain good health. This can reduce one’s chance of becoming sick (i.e., reducing loss frequency). On the other hand, even if the person does get sick, he/she can recover quickly (i.e., reducing the loss severity) as he/she is fit. Therefore, we can say that exercising regularly can prevent the loss as well as reduce the loss due to illness.

p.198 Additional information

Another example of transferring risk by making contractual agreements is shown below:

Suppose a university hires a construction firm to add an annex to a teaching building. If a student is unfortunately injured in the building due to the construction work, the university, as the owner of the property, would be held liable. However, if the university has put a ‘hold-harmless provision’ in the construction contract against any liability arising from the construction work, the construction company would be held liable instead. Therefore, in the real world, the bearer of a liability risk is usually clearly stated in the contract of a project.

Additional information Students may question that if every firm can transfer its risks to insurance companies, can the insurance companies themselves transfer their risks? The answer is yes. If an insurance company wants to protect itself from the risk of not being able to compensate customers (i.e., the insured) for their risks, it may choose to purchase insurance from another insurance company. This process is called reinsurance and the insurer protecting the insurance company is called a reinsurer. In fact, some insurance companies solely have other insurance companies as their customers.

p.199 Additional information

The appropriate risk management measures for different types of loss are described in the following matrix:

		Loss Frequency	
		Low	High
Loss Severity	Low	Risk assumption	Risk assumption / Risk reduction
	High	Risk transfer (Insurance)	Risk avoidance

Note that the above matrix only shows the general rule. When selecting risk management measures, firms should also consider factors such as their own resources, degree of risk acceptance and other risk control options that are available.

In an insurance contract, the insured and the policyholder may not always be the same party. The insured is the party for the risks for whom protection is provided against risks. On the other hand, the policyholder is the party that pays the premium for insurance protection. For example, in the case of a life insurance for the company's CEO (mentioned in p.208), the insured is the CEO while the company is the policyholder.

Additional information

Although a risk is said to be insurable if it satisfies these five conditions, insurance companies may not insure everyone for insurable risks. If the insurer finds out that the risk of an insurance applicant, even if insurable, is too high, it may reject the application as it probably cannot profit from the insurance policy. For example, although cancer is an insurable risk, an insurance company may not insure a person for this risk if he/she has had cancer before. This is because the chance of cancer recurring is very high. It is very likely that the insurance company will have to pay compensation if it insures this person.

p.202 Additional information

In order to ensure that a loss is not deliberately caused by the insured, insurance companies require proof of loss (such as a death certificate) before paying any compensation. If necessary, the insurers may investigate the loss events.

For the same reason, all life insurance policies state that no compensation will be paid for the death of the insured during an initial period of time (e.g., six months) after the issuance of the insurance contract. This is to prevent people from gaining the compensation for their families by committing suicide.

p.203 Additional information

Other than rejecting protection for small losses, insurance companies may reduce administration costs due to small losses by imposing a deductible provision on their insurance policies. In such cases, the insurance company would only pay the amount of the loss after subtracting deductible (e.g., \$5,000). If a loss incurred by the insured is too small (less than \$5,000 in this case), no compensation would be given.

Additional information In addition to war, insurance companies normally do not cover losses due to natural disasters and terrorism. This is because these events also incur losses from a large number of people.

p.204 Additional information

Although speculative risk is non-insurable in principle, some specialist insurance companies offer insurance products to protect against certain kinds of speculative risks, such as interest rate risk, exchange rate risk and credit risk. For example, Market Guard from the UK and Atradius from the Netherlands both provide insurance products to protect against exchange rate risk. The former even provides insurance protection against interest rate risk and fluctuations in stock prices.

p.206 Additional information

Although a visitor slipping on a wet floor in a shopping mall may sue the mall for injuries, according to business law, the mall would not be liable if it has provided clear and sufficient warning to alert the visitors (such as placing a warning sign next to the wet floor). Also, if a person accessed and got injured in a place which was not open to the public, the owner would not be liable either. As the ordinances and provisions under business law are too complicated for secondary school students, it is enough for them to know which kind of insurance should be applied in different situations instead of judging whether a party is liable.

p.207 Additional information (Fig. 6.22)

Such liability insurance is called professional liability insurance.

p.208 Additional information

There are various types of life insurance. The simplest one is that the insurer pays compensation only upon the insured's death. Modern life insurance may also include a medical component (i.e., a combination of life and medical insurance), a savings component or an investment component (i.e., investment-linked life insurance).

Additional information In the life insurance policy for employees, the employees' families are named as beneficiaries. A beneficiary is the party to whom the insurance compensation is paid. Therefore, the compensation can be paid directly to the employees' families even though the insurance premium is paid by the firm.

Additional information Life insurance purchased by a firm for its key employees and partners is called key person insurance. Normally, key person insurance will also protect against the disability of the key person if he is incapable of working.

Answers to Try This Activity

A1 The major purpose of buying life insurance for employees is to cover the losses due to their deaths. Hence, top priority should be given to executives who possess intangible human capital, such as leadership and talents, and are difficult to be replaced with others. This is because their deaths will affect the company the most. Therefore, the company should buy life insurance for the CEO and the Vice President of Marketing, but not the chairman of the board of directors.

Additional information

Other than the types of insurance mentioned in this chapter, it is also common for firms (especially multinational companies) to purchase travel insurance for their employees who need to travel frequently. A travel insurance policy covers undesired events happened during a trip, such as injury or death of the insured, damage to or loss of luggage, and delayed departure.