## Lesson 11: International forward contracts markets

The international forward contracts market is a financial market where individuals and businesses can enter into contracts to buy or sell assets, currencies, or commodities at a future date and a fixed price. These contracts are known as forward contracts.

Forward contracts are different from futures contracts, which are standardized contracts traded on exchanges. In a forward contract, the terms are negotiated between the two parties involved, and there is no standardized contract. This means that forward contracts can be tailored to the specific needs of the parties involved.

The international forward contracts market is used by businesses to hedge against currency fluctuations and price volatility. For example, if a company imports goods from another country, they may enter into a forward contract to buy the foreign currency they need to pay for those goods at a fixed exchange rate. This protects the company from the risk of the foreign currency becoming more expensive in the future.

The international forward contracts market is also used by investors for speculative purposes. For example, an investor may enter into a forward contract to buy a commodity such as oil or gold at a future date at a fixed price, hoping that the price of the commodity will rise in the meantime. If the price does rise, the investor can sell the commodity for a profit.

One of the main risks associated with forward contracts is counterparty risk. This is the risk that one of the parties involved in the contract will default on their obligation. To mitigate this risk, parties often use intermediaries such as banks or brokerages to facilitate the contract.

Another risk associated with forward contracts is market risk. This is the risk that the market price of the asset, currency, or commodity will move in a direction that is unfavorable to one of the parties involved. While forward contracts can be used to hedge against market risk, there is always some level of risk involved.

In summary, the international forward contracts market is a financial market where individuals and businesses can enter into contracts to buy or sell assets, currencies, or commodities at a future date and a fixed price. These contracts can be used for hedging or speculative purposes, but there are risks associated with them, including counterparty risk and market risk.

## here are some practical exercises about forward contracts along with solutions:

Exercise 1: Currency Forward Contract Assume that a U.S. company has agreed to purchase 100,000 euros from a European company in six months. The current exchange rate is 1 euro $=\$ 1.10$. The U.S. company has entered into a forward contract to purchase the euros at a fixed exchange rate of 1 euro $=\$ 1.12$. What is the total cost of the euros in U.S. dollars?

Solution: The current cost of 100,000 euros in U.S. dollars is: 100,000 euros $\mathrm{x} \$ 1.10=$ \$110,000

However, the U.S. company has entered into a forward contract to purchase the euros at a fixed exchange rate of 1 euro $=\$ 1.12$. Therefore, the total cost of the euros in U.S. dollars is: 100,000 euros $\mathrm{x} \$ 1.12=\$ 112,000$

Exercise 2: Commodity Forward Contract Assume that a coffee roasting company has agreed to purchase 10,000 pounds of coffee beans from a supplier in six months. The current market price for coffee beans is $\$ 1.50$ per pound. The coffee roasting company has entered into a forward contract to purchase the coffee beans at a fixed price of $\$ 1.70$ per pound. What is the total cost of the coffee beans in six months?

Solution: The current cost of 10,000 pounds of coffee beans is: 10,000 pounds $\times \$ 1.50$ per pound $=\$ 15,000$

However, the coffee roasting company has entered into a forward contract to purchase the coffee beans at a fixed price of $\$ 1.70$ per pound. Therefore, the total cost of the coffee beans in six months is: 10,000 pounds $\times \$ 1.70$ per pound $=\$ 17,000$

Exercise 3: Forward Contract Hedge Assume that a U.S. company is expecting to receive 100,000 euros in six months from a customer in Europe. The current exchange rate is 1 euro $=\$ 1.10$. The U.S. company is concerned about the exchange rate changing and has entered into a forward contract to sell the euros at a fixed exchange rate of 1 euro $=\$ 1.08$. What is the total amount of U.S. dollars the U.S. company will receive in six months?

Solution: Without the forward contract, the U.S. company would receive: 100,000 euros x $\$ 1.10=\$ 110,000$

However, the U.S. company has entered into a forward contract to sell the euros at a fixed exchange rate of 1 euro $=\$ 1.08$. Therefore, the total amount of U.S. dollars the U.S. company will receive in six months is: 100,000 euros $\mathrm{x} \$ 1.08=\$ 108,000$

By entering into the forward contract, the U.S. company has effectively hedged against the risk of the euro depreciating in value against the U.S. dollar.

