Lesson 12: International Futures Contract Markets

International futures contract markets are financial exchanges that allow traders to buy or sell futures contracts for a variety of underlying assets, such as commodities, currencies, and securities. Futures contracts are agreements between two parties to buy or sell an asset at a predetermined price and date in the future.

The international futures contract markets provide a way for traders to hedge their risks and speculate on future price movements. Traders who want to lock in a price for an asset can use futures contracts to ensure they will be able to buy or sell the asset at a set price in the future, regardless of how the market may have changed in the interim.

One of the main advantages of international futures contract markets is their ability to provide liquidity and transparency. The markets are highly standardized, meaning that all contracts for a particular asset are the same, regardless of who is buying or selling them. This makes it easier for traders to find counterparties and execute trades quickly. Additionally, the markets are transparent, with prices and trading volumes readily available for all participants to see.

There are several key players in the international futures contract markets. Traders are the most visible participants, buying and selling contracts to speculate on future price movements or hedge their risks. Market makers are firms that provide liquidity to the market by standing ready to buy or sell contracts at all times. Clearinghouses act as intermediaries between buyers and sellers, ensuring that all contracts are honored and that traders have sufficient collateral to cover their positions. Regulators oversee the markets to ensure that they operate fairly and efficiently, and to protect investors from fraud and other abuses.

Finally, it's worth noting that international futures contract markets can be complex and risky, and are not suitable for all investors. Traders who are considering investing in futures contracts should make sure they have a thorough understanding of the underlying assets, the mechanics of the markets, and the risks involved. They should also work with a qualified financial advisor to determine whether futures trading is appropriate for their particular investment goals and risk tolerance.

here are some key differences between Forward Contracts and Future Contracts:

- 1. **Standardization:** Forward contracts are customized agreements between two parties and are not standardized. The terms of a forward contract can be negotiated between the buyer and seller. On the other hand, Futures contracts are standardized agreements that trade on exchanges. The contracts have fixed terms such as contract size, delivery dates, and quality of the underlying asset.
- 2. **Counterparty risk:** Since forward contracts are private agreements between two parties, there is a risk of default by either party. This is known as counterparty risk. Futures contracts, on the other hand, are guaranteed by the exchange, reducing the risk of default by either party.

- 3. **Trading:** Forward contracts are traded over-the-counter (OTC), meaning that they are not traded on an exchange. Futures contracts, on the other hand, are traded on exchanges, and traders can buy or sell contracts through their brokers.
- 4. **Settlement:** The settlement of a forward contract occurs at the end of the contract term, while the settlement of a futures contract happens daily. In a forward contract, the buyer and seller are obligated to settle the transaction on the specified delivery date at the agreed-upon price. In a futures contract, daily settlement occurs through the marking-to-market process, where gains or losses are settled daily, and the final settlement occurs at the end of the contract.
- 5. Liquidity: The liquidity of forward contracts is generally lower than futures contracts. Futures contracts are traded on exchanges and offer high liquidity due to the standardized terms and large trading volumes.
- 6. **Flexibility:** Forward contracts offer more flexibility in terms of contract terms and delivery dates, while futures contracts have limited flexibility due to their standardized terms.
- 7. **Initial Margin:** In a forward contract, there is no initial margin payment. In a futures contract, traders are required to make an initial margin payment to cover potential losses that may occur during the term of the contract.

Overall, the main differences between forward and future contracts are their standardization, counterparty risk, trading, settlement, liquidity, flexibility, and initial margin requirements.

how do daily settlements of International Futures Contracts work?

Daily settlements are the process by which gains and losses on futures contracts are settled on a daily basis. The settlement amount is calculated based on the difference between the price at which the contract was purchased and the settlement price for that day.

The settlement price is determined by the exchange on which the contract is traded, and it is usually based on the average of the prices of the underlying asset during a specific period of time. This period of time is known as the settlement period, and it can vary depending on the exchange and the contract.

For example, let's say you purchase a futures contract for crude oil on the New York Mercantile Exchange (NYMEX). The contract size is 1,000 barrels, and the initial price is \$60 per barrel. The contract expires in three months.

On the first day of trading, the settlement price for crude oil is \$62 per barrel. The difference between the purchase price and the settlement price is \$2 per barrel. Therefore, your daily settlement amount is \$2,000 (i.e., $$2 \times 1,000$ barrels).

On the second day of trading, the settlement price for crude oil is 61 per barrel. The difference between the purchase price and the settlement price is -1 per barrel. Therefore, your daily settlement amount is -1,000 (i.e., $-1 \times 1,000$ barrels).

If your settlement amount is positive, you will receive that amount from the exchange. If your settlement amount is negative, you will have to pay that amount to the exchange.

The daily settlement amounts are added to or subtracted from your account balance, which is updated daily. If your account balance falls below the maintenance margin level, you may receive a margin call and be required to deposit additional funds into your account.

It's important to note that daily settlements do not affect the expiration price of the contract, which is the price at which the contract is settled when it expires. However, daily settlements can have a significant impact on your account balance and your ability to maintain your position in the futures market.

Here are some exercises along with solutions about the daily settlements of International Future Contracts:

Exercise 1: You have purchased a futures contract for gold with an initial price of \$1,800 per ounce. The contract size is 100 ounces, and the contract expires in three months. On the first day of trading, the settlement price for gold is \$1,820 per ounce. What is your daily settlement amount, and what is your new account balance?

Solution: The difference between the purchase price and the settlement price is \$20 per ounce. Therefore, your daily settlement amount is \$2,000 (i.e., \$20 x 100 ounces).

To calculate your new account balance, add the daily settlement amount to your initial account balance. If your initial account balance is 20,000, then your new account balance would be 22,000 (i.e., 20,000 + 2,000).

Exercise 2: You have sold a futures contract for crude oil with an initial price of \$70 per barrel. The contract size is 1,000 barrels, and the contract expires in three months. On the first day of trading, the settlement price for crude oil is \$72 per barrel. What is your daily settlement amount, and what is your new account balance?

Solution: The difference between the purchase price and the settlement price is -\$2 per barrel. Therefore, your daily settlement amount is -\$2,000 (i.e., -\$2 x 1,000 barrels).

To calculate your new account balance, subtract the daily settlement amount from your initial account balance. If your initial account balance is \$25,000, then your new account balance would be \$23,000 (i.e., \$25,000 - \$2,000).

Exercise 3: You have purchased a futures contract for corn with an initial price of \$5.50 per bushel. The contract size is 5,000 bushels, and the contract expires in three months. On the first day of trading, the settlement price for corn is \$5.25 per bushel. What is your daily settlement amount, and what is your new account balance?

Solution: The difference between the purchase price and the settlement price is -\$0.25 per bushel. Therefore, your daily settlement amount is -\$1,250 (i.e., $-\$0.25 \times 5,000$ bushels).

To calculate your new account balance, subtract the daily settlement amount from your initial account balance. If your initial account balance is \$15,000, then your new account balance would be \$13,750 (i.e., \$15,000 - \$1,250).

exercises about International Future Contracts along with solutions:

Exercise 1: Calculating the Profit or Loss on a Futures Contract Suppose you purchased a futures contract for 100 barrels of crude oil at a price of \$50 per barrel. The contract expires in 3 months, and the spot price of crude oil at the expiration date is \$60 per barrel. The contract size is 1,000 barrels. What is your profit or loss on the contract?

Solution: Purchase price = \$50 per barrel Expiration price = \$60 per barrel Contract size = 1,000 barrels Profit or Loss = (Expiration price - Purchase price) x Contract size = (\$60 - \$50) x 1,000 = \$10,000 profit

Exercise 2: Hedging with Futures Contracts Suppose you are a farmer who is concerned about the price of wheat. You have a large crop that you will be harvesting in 3 months, and you are worried that the price of wheat will drop before you can sell it. You decide to hedge your position by selling a futures contract for 10,000 bushels of wheat at a price of \$5 per bushel. The contract expires in 3 months, and the spot price of wheat at the expiration date is \$4 per bushel. The contract size is 5,000 bushels. What is your profit or loss on the contract, and did it effectively hedge your position?

Solution: Sell price = \$5 per bushel Expiration price = \$4 per bushel Contract size = 5,000 bushels Profit or Loss = (Sell price - Expiration price) x Contract size = (\$5 - \$4) x 5,000 = \$5,000 loss

This futures contract did not effectively hedge your position, as the spot price of wheat decreased and the futures contract did not provide you with protection against that price drop.

Exercise 3: Speculating with Futures Contracts Suppose you believe that the price of gold will increase in the next 6 months. You purchase a futures contract for 10 ounces of gold at a price of \$1,500 per ounce. The contract expires in 6 months, and the spot price of gold at the expiration date is \$1,700 per ounce. The contract size is 100 ounces. What is your profit or loss on the contract?

Solution: Purchase price = \$1,500 per ounce Expiration price = \$1,700 per ounce Contract size = 100 ounces Profit or Loss = (Expiration price - Purchase price) x Contract size = (\$1,700 - \$1,500) x 100 = \$20,000 profit

Exercise 4: Margin Call Suppose you purchase a futures contract for 1,000 barrels of crude oil at a price of \$60 per barrel. The contract expires in 3 months, and the spot price of crude oil at the expiration date is \$50 per barrel. The initial margin requirement for the contract is \$10,000, and the maintenance margin requirement is \$8,000. Assume that the price of crude oil decreases by \$1 per barrel each day. At what point will you receive a margin call, and what will the required deposit be to bring your account back up to the initial margin level?

Solution: Purchase price = \$60 per barrel Expiration price = \$50 per barrel Contract size = 1,000 barrels Initial margin requirement = \$10,000 Maintenance margin requirement = \$8,000

Profit or Loss = (Expiration price - Purchase price) x Contract size = (\$50 - \$60) x 1,000 = \$10,000 loss.