

KASE



INTRODUCTION TO THE FUTURES

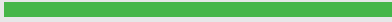


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Welcome to the world of futures!

If you're just starting out on your investing journey and want to learn more about how futures work, then this booklet is especially for you.

We'll walk you through the basic concepts and definitions to help you better understand how you can use futures in your investment strategies.

Let's start!



THE DEFINITION OF THE UNDERLYING ASSET

To better understand how futures work, it is important to know what the underlying asset is.

Imagine you want to buy a mobile phone.



You are happy with the current price of the phone, but you don't have the money to buy it right now.

You assume that in a month the price of the phone will increase.

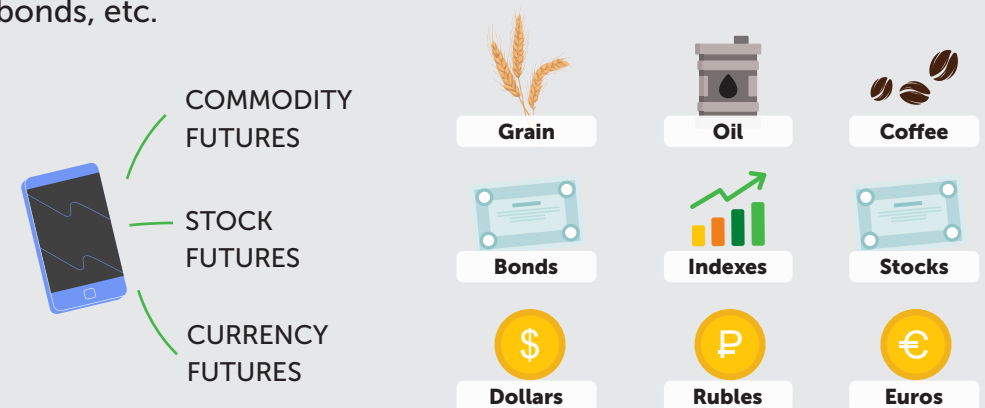
In this situation, you can enter into a futures contract, according to which you will purchase a phone in a month **at the current price**.



This way, if the price of the phone increases in a month, you will protect yourself from the price increase.

Mobile phone is **the underlying asset** in this situation.

The underlying asset of a futures contract can be stocks, stock indices, currencies, commodities (oil, metals, agricultural products), bonds, etc.



EXAMPLES OF A FUTURES TRANSACTION



Looking ahead, we note that futures can be deliverable and non-deliverable.

Now let's imagine an example of a deal between two participants using a mobile phone futures.

Let's assume that the parties to the transaction are you and your friend.

A friend wants to sell his phone, but you are ready to buy it only in a month.

The current price of the phone is approximately 250,000 tenge. You and a friend are negotiating a contract to buy a phone.

According to the terms of the contract, in a month you will buy a phone from a friend for 250,000 tenge.

Let's see which of you will be the winner in a month?

If the price has increased

If the price has decreased

A month later the price increased to 270,000 tenge

A month later, the phone began to cost 230,000 tenge

According to the contract, you buy a phone from a friend at the old price of 250,000 tenge

Thanks to futures, you purchased a phone at a price lower than the current/market price

Thanks to futures, your friend protected himself from a decrease in the price of his phone

So, your friend sold you a phone for 250,000 tenge

At the same time, the real market price is 270,000 tenge

At the same time, the real market price is 230,000 tenge

This is a bargain for you, as you saved 20,000 tenge!

Unfortunately, you overpaid 20,000 tenge

And your friend, after concluding a futures transaction, was not worried about the price decreasing in the future. Thus, he hedged ("insured") his risks.

Therefore, one of the purposes of purchasing futures contracts is to hedge the risk of changes in the price of the underlying asset.

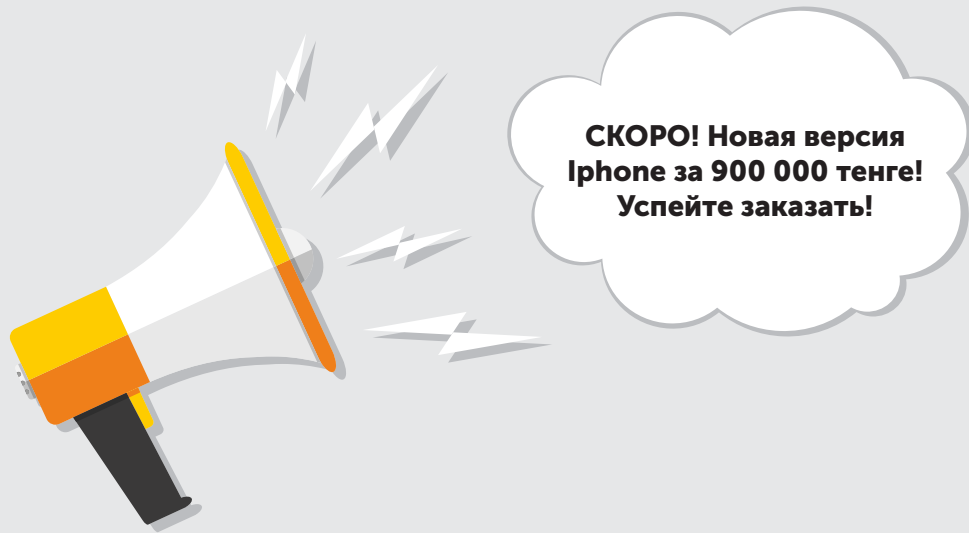
This example illustrates how participants can use futures to enter into deals on changes in the prices of an underlying asset, in this case, the price of a smartphone.

This example is an example of a **deliverable** futures contract, as a result of which a friend "delivered" a phone to you, and you paid for it.

Futures allow two parties (the buyer and the seller) to conclude a deal on a future date at a predetermined price. One party agrees to buy the asset and the other agrees to sell it at that price in the future.

Let's move along!

A futures contract can be concluded even if your friend does not have a phone and you have no intention of buying one. You just decided to play – make a bet.



Let's say you heard that a new version of iPhone is expected to be released, which will begin to be sold in the "X" store in a month at a price of about 900,000 tenge

You have decided to make a bet (futures contract)

You think that the price will be higher than 900,000 tenge. You are a futures buyer (expecting a price increase)

Your friend thinks the price will be lower. He is a futures seller (counting on a price decrease). The winnings as a result of the bet will be the difference between the agreed amount and the price in store "X"

Let's see which of you will be the winner in a month?

If the price is higher than agreed upon in the contract	If the price is lower than agreed upon in the contract
In store "X" the phone began to be sold for 950,000 tenge	In store "X" the phone began to be sold for 850,000 tenge
According to the contract, the price of the phone is set at 900,000 tenge	
You win 50,000 tenge (current price – the price established in the contract)	A friend wins 50,000 tenge (the price established in the contract – the current price)
$950,000 - 900,000 = 50,000$	$900,000 - 850,000 = 50,000$ tenge
This is a bargain for you!	This is a bargain for a friend!
	Unfortunately, you're out of luck...

This example is an example of a settlement or non-deliverable futures contract where there was no "delivery" of the phone.

In the world of finance, such deals are concluded to protect against price changes (to hedge risks) or to try to profit from future price changes.

In our examples, you were worried or expected that the price of a phone that currently costs 250,000 tenge would increase. You agreed with a friend that in a month he would sell you the phone for 250,000 tenge.

If prices rise in a month, you will already have an agreement to purchase at the price established in the contract – 250,000 tenge.

It is important to understand that a futures contract is, essentially, an agreement on a price that will be relevant over time.

You can use a futures contract to fix the price for the future, thus protecting yourself from possible changes. If the prices of the underlying asset (e.g. phones) rise, you still buy at the old contract price and save money.

It's like "insurance" against unexpected price changes. You can plan your expenses with peace of mind knowing that your price is already fixed.

! One more nuance: futures transactions are concluded only on an exchange.

Therefore, futures transactions can be concluded not only with a friend, but also with other participants, and thanks to exchange mechanisms, futures settlements take place automatically and with minimal risk that the other party may not fulfill their part of the transaction

TYPES OF FUTURES AND POSITIONS OF THE PARTIES TO THE TRANSACTION

Using the example of buying a phone and betting on upcoming sales of a new phone, you saw the difference. In the first case, you purchased a phone, in the second case, you won or lost money.

Thus, you learned that futures are:

Deliverable

This is a type of futures contract for the delivery of something in the future.

In the first example, you bought a phone from a friend a month later.

In the case of a deliverable futures seller at the time of execution there is an obligation to deliver goods to the buyer, from the buyer - obligation to pay for goods.


For example, if two parties entered into a delivery futures contract for oil, then at the end of the contract, one party must deliver the actual oil, and the other party must accept that oil and pay for it according to the terms of the contract.


That is, upon expiration of the contract, the physical asset is delivered.

Settlement

This is a type of futures contract in which physical delivery of the asset does not occur.

In the second example, you and your friend made a "bet". Instead of transferring the phone, you simply compare the agreed price and the price of the phone on a certain date (in our example, a month from now), and the difference is paid in money.

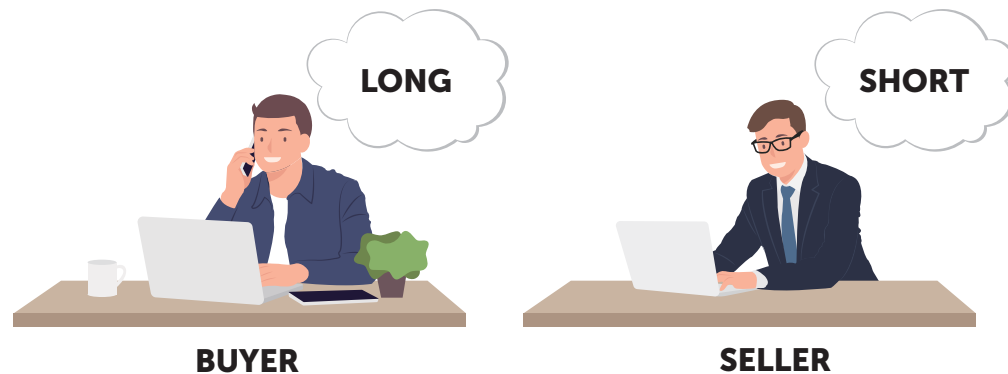
If the price goes up, your friend will pay the difference. 

If the price has dropped, you will pay the difference. 

In this case, the parties to the contract can receive money or pay money depending on price changes.

That is, upon expiration of the contract, the difference between prices without physical delivery of the product/asset is calculated and paid.

There are two positions possible in the futures market: long and short.



BUYER

SELLER

A **long position** is opened by **purchasing** a futures contract. The owner of this position is obliged **to buy*** the underlying asset on the closing date of the transaction.

This position may generate **income**, if **the price of** the underlying asset **increases** and, accordingly, the loss in the event of a decrease in the price of the underlying asset.

A **short position** is opened by **selling** a futures contract. The owner of this position is obliged **to sell*** the underlying asset on the closing date of the transaction.

This position can generate **income**, if **the price of the underlying asset decreases** and, accordingly, a loss, if the price of the underlying asset increases.

* in the case of a settlement futures, calculations of obligations/claims are made depending on the difference in the value of the position and the value of the underlying asset

Shall we try to solve the task?

Investors concluded a settlement futures contract for a share at 1,200 tenge and uphold it until the contract expired. The share price on the last day of the contract is 900 tenge. Determine the financial outcome for the buyer and seller.

Solution:

For the buyer
(expected a price increase,
takes a long position)

For the seller
(counted on a price drop, takes a
short position)

Share price at the time of conclusion of the contract – 1200
Share price at the time of contract expiration – 900 tenge

Financial result: -300 tenge
(loss)

Financial result: 300 tenge
(profit)

! It is important to note that you do not have to wait for the futures contract to expire and close the deal on any day.

But as long as you own the futures, its price will change every day. And now we will move on to such concepts as collateral, variation margin and margin call.

THE CONCEPT OF COLLATERAL, VARIATION MARGIN AND MARGIN CALL

Collateral for a futures (CF) is a specified amount that the buyer and seller of a futures must deposit to participate in the transaction.

CF is often also called "initial margin".

In the smartphone futures examples, if you buy the futures, you need to make a CF to show that you are serious about buying the phone/paying the difference on the settlement futures. The futures seller also deposits a CF to show that he is willing to sell the phone/pay the difference on the settlement futures.

The CF amount is calculated as a certain percentage of the contract value, for example 10%.

If both parties fulfill their obligations, then the CF will be returned to the parties to the transaction after the contract is fulfilled. However, if someone defaults on their obligations, the CF can be used to cover the other party's losses.

- CF (initial margin) is not the final cost of the transaction, but rather a kind of "collateral" that ensures that both parties will fulfill their obligations under the contract. Thus, the initial margin serves as a guarantee of fulfillment of obligations on open positions.

You must ensure that there is always a little more money in the account than the CF. When you explain variation margin, you'll understand why.

Variation Margin (VM) is the money you must deposit or receive each day based on changes in the futures price. Variation margin is the difference between the current and initial price of a futures contract.

If the price of the underlying asset increases, then you as the buyer will receive additional money as a VM. If the price falls, you will have to post additional collateral as a margin call.

Margin call is a negative value of the variation margin, which entails the broker's requirement to replenish the account to maintain the futures contract.

EXPLANATION OF VARIATION MARGIN CALCULATION BY DAY

Let's say you and your friend enter into a futures contract with the following terms:

Quantity – 500 pcs. of shares of company X,

Share price – 100 tenge,

CF (initial margin) – 5000 tenge each.

Let's see how your accounts will change due to changes in the price of Company X's shares over a 3-day period.

Day 1 – day of concluding a futures contract.

There is no change in the stock price, no change in the contract value, and therefore no variation margin for either buyer or seller.

Day	Price of 1 share (tenge per share)	Contract value (500 shares*100 tenge)	CF (initial margin) of the buyer	CF (initial margin) of the seller
1	100	50,000	5,000	5,000

Day 2

On the second day, the share price increased by 5 tenge, which increased the value of the contract by 2,500 tenge. The buyer is credited 2,500 tenge as a variation margin, and the seller incurs a loss of – 2,500 tenge.

Day	Price of 1 share (tenge per share)	Contract value (500 shares*100 tenge)	Variation margin for the buyer	Variation margin for the seller	CF (initial margin) of the buyer (futures price*CF in%)	CF (initial margin) of the seller (futures price*CF in%)
1	100	50,000	-	-	5,000	5,000
2	105	52,500	+2,500	-2,500	5,250 (10% of the contract value)	5,250 (10% of the contract value) Here the seller needs to deposit additional money

If the seller does not deposit additional money as a CF, the transaction will be closed forcibly.

And in this case, the financial result at the end of day 2 will be as follows:

Buyer

- 1) refund of CF 5,000 tenge
- 2) income 2,500 tenge (50% of income from the contributed CF)

Seller

- return of CF, minus a loss of 2,500 tenge: $5,000 - 2,500 = 2,500$ tenge (loss of 50% of the contributed CF)

If the seller wants to further uphold his position, then he needs to deposit additional money into the account to replenish the CF, as well as cover his current loss (a margin call occurs).

Let's calculate how much money the seller needs to deposit to continue the transaction:

- 1) on the first day of the transaction, the seller had 5,000 tenge blocked in his account;
- 2) on the second day, the CF amount increased to 5,250 tenge on the second day, which means you need to add 250 tenge;
- 3) since the seller suffered a loss of 2,500 tenge, this loss is deducted from the CF amount.

As a result: $(5,000 - 2,500) + 250 = 2,750$ tenge must be paid to the seller to continue the transaction.

As we wrote earlier, you need to always have a little more on your account than the CF amount on the first day of the transaction, so as not to worry that the broker will forcefully close the position in the event of a margin call.

If the transaction continues, subject to the seller replenishing the account, the financial result at the end of day 2:

Buyer		Seller	
Amount blocked as CF	Free balance	Amount blocked as CF	Free balance
5,000 (CF on day 1) + 250 tenge (blocked from VM)	2,500 (VM) - 250 (to replenish CF)	5,000 (CF on day 1) - 2,500 (subtracted from the CF to cover the loss on day 2) + 2,750 (replenishment of the seller's CF and closing the loss)	0
5,250 tenge	2,250 tenge	5,250 tenge	

Day 3

On the third day, the share price fell by 3 tenge, which reduced the value of the contract by 1,500 tenge. The buyer incurs a loss of 1,500 tenge as variation margin, and the seller receives a profit of 1,500 tenge.

Day	Price of 1 share (tenge per share)	Contract value (500 shares*100 tenge)	Variation margin for the buyer	Variation margin for the seller	CF (initial margin) of the buyer (futures price* CF in%)	CF (initial margin) of the seller (futures price* CF in%)
1	100	50,000	-	-	5,000	
2	105	52,500	+2,500	-2,500	5,250 (10% of the contract value)	5,250 (10% of the contract value) The seller contributed additional money
3	102	51,000	-1,500	1,500	5,100	5,100

On the third day, the buyer incurs a loss because the futures price has decreased, but he does not need to replenish the account since he received income on the second day from the transaction (VM on day 2 2,500 – VM on day 3 1,500 = 1000 tenge).

The seller receives income in the form of VM 1500 tenge.

If the transaction is closed on day 3, the financial result will be as follows:

Buyer	Seller
1) refund of CF 5,000 tenge	5,000 tenge (CF)
2) income: 5,000 tenge	-2,500 tenge (VM loss on day 2)
+2,500 tenge (VM on day 2)	+1,500 income (VM on day 3)
-1,500 (loss on day 3)	4,000 tenge
1,000 tenge (income 20% of the contributed CF)	The seller will receive 4,000 tenge instead of the deposited 5,000 tenge.
	The final loss will be 1,000 tenge (20% of the contributed CF)

If the transaction continues, the financial result at the end of day 3 will be as follows:

Buyer		Seller	
Amount blocked as CF	Free balance	Amount blocked as CF	Free balance as CF
5,000 (CF day 1)	2,500 (VM day 2)	5,000 (CF day 1)	1,500 (VM day 3)
+ 100 tenge (blocked from VM of day 2 2,500 tenge)	- 100 (to replenish CF)	+ 100 tenge (blocked from VM of day 3 1,500 tenge)	- 100 (blocked for CF replenishment)
5100 tenge	900 tenge	5,100 tenge	1,400 tenge

**All of the above calculations were carried out in a simplified form to understand the process of calculating the variation margin.*

And thus, the exchange calculates the wins/losses of the transaction participants every day until the transaction is closed.

Participants in a futures transaction can hold the position open until the contract expires or close the transaction on any day before the contract expires.

Every day there will be a movement of funds through their accounts: the Exchange will credit the current winnings or write off the current losses. It determines current wins and losses based on the results of each trading session.

If the price of the underlying asset begins to move in the opposite direction than you expected, your position may become unprofitable, requiring you to deposit additional money (a margin call occurs). This is done to ensure that you always have enough funds in your accounts to cover losses.

Important: a margin call is not an additional expense, but an amount that is temporarily frozen in the account as collateral. If your position becomes profitable, then after closing the contract, the margin call amount will be returned to you.

HOW TO PARTICIPATE IN FUTURES TRANSACTIONS?

A futures contract can only be concluded through a brokerage company that is a member of the exchange.

Therefore, the FIRST STEP to starting futures trading is concluding an agreement with a broker from the list presented on KASE website <https://kase.kz/en/membership/>

which is an active member of the derivatives section, after which the broker will open an account on your behalf

SECOND STEP – account replenishment

To trade on the derivatives market, you need to transfer money to an account that will be opened for you by a broker.

THIRD STEP – submitting a buy/sell order to the broker

Transactions are carried out by the Broker on the Exchange based on client orders received from you. The broker will tell you in what form it accepts client orders, orders and other instructions.

RISKS AND CAUTIONS

The risk of futures is that you can lose your collateral: if prices move in a direction other than your forecasted, you can lose some or all of your collateral.

Futures trading can be risky and not all deals are profitable. It is important to monitor your position and be prepared to lose funds.

Futures trading requires a good understanding of the market and investment strategies. Ignorance can lead to mistakes and losses.

AFTERWORD

So, you found out that:

futures is a contract to buy/sell an underlying asset in the future at a predetermined price.

The futures buyer is a participant in the transaction who expects the price to increase. He takes a **long position in the deal**.

The futures seller is a participant in the transaction who expects the price to decrease. He takes a short **position in the deal**

There are the following types of futures:

deliverable, which results in physical delivery of the underlying asset at the end of the futures contract

settlement, as a result of which the parties do not deliver the underlying asset, but pay the difference between the price agreed upon in the contract (contract price) and the market price of the underlying asset on the execution date

To conclude a futures transaction, it is necessary to provide a **collateral** – a monetary "deposit", which is blocked on the exchange when a futures position is opened.





You also learned that **variation margin** (VM) is the money that you must deposit or receive every day depending on changes in the price of the futures and, using an example, you could see how it changes every day depending on the change in the price of the underlying asset.

Futures are a tool for managing risks and profiting from changes in market prices. Before taking part in futures trading, you need to thoroughly study this market, understand its features and risks.






You can learn more about futures from the brochure "Futures on KASE", as well as at our training events.

The information in this brochure is provided for educational purposes and does not constitute investment advice. Trading financial instruments is always associated with risk, and each investor must make his own decisions, taking into account his goals and circumstances.

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