Market Talks
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CRYPTO · BEGINNER · LESSON 11 OF 15

Spot vs Derivatives: A First Look at Futures, Perpetuals and Leverage

The difference between owning a coin and trading a contract on its price, how futures and perpetuals work, what going long or short means, and how leverage and liquidation change the risk

11 min read 8 quiz questions with answer key

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Spot vs Derivatives: A First Look at Futures, Perpetuals and Leverage

IN ONE SENTENCE

Spot trading means buying the coin itself, while derivatives are contracts on its price that let traders go long or short with leverage, which multiplies both gains and losses and can wipe out a position through liquidation.

Spot: you own the coin

When you buy bitcoin on the **spot** market, you pay the full price and receive the actual coin. You can hold it, send it to your own wallet or spend it. If the price falls, your coin is worth less, but you still own it, and the most you can lose is what you paid.

Everything in this course so far, from exchanges to wallets to networks, has been about spot. But on crypto exchanges, spot is the smaller part of the activity.

Derivatives: contracts on the price

A **derivative** is a contract whose value comes from the price of something else. A bitcoin derivative lets you profit or lose from bitcoin's price moves without owning any bitcoin. You never receive a coin; you only settle the gains and losses, usually in a stablecoin such as USDT.

In crypto, derivatives are where most of the money moves. According to CoinGlass, about **$20.6 trillion** was traded across crypto markets in the first quarter of 2026, and about **90%** of it was derivatives. Spot was under $2 trillion.

Derivatives exist in traditional markets too, for oil, gold, stock indexes and currencies. They are used both to bet on price moves and to **hedge**, meaning to protect an existing holding against a fall.



Figure 1. In the first quarter of 2026, derivatives made up about 90% of all crypto trading volume (CoinGlass data).

Futures and perpetuals

The two main crypto derivatives are:

- **Futures:** an agreement to buy or sell at a set price on a set date. When the date arrives, the contract expires and is settled. Regulated markets such as CME in the United States offer bitcoin and ether futures of this kind.
- **Perpetual futures**, or **perps:** futures with no expiry date. You can hold a position for as long as you like. Perpetuals are the most traded product in crypto.

Without an expiry date, what keeps a perpetual's price close to the real spot price? A mechanism called the **funding rate**. Every few hours, often every 8 hours, traders on one side pay a small fee to traders on the other side:

- If the perpetual trades **above** spot, usually because more traders are betting on a rise, funding is positive and buyers pay sellers.
- If it trades **below** spot, funding is negative and sellers pay buyers.

These payments make it costly to stay on the crowded side, which pulls the perpetual's price back toward spot.

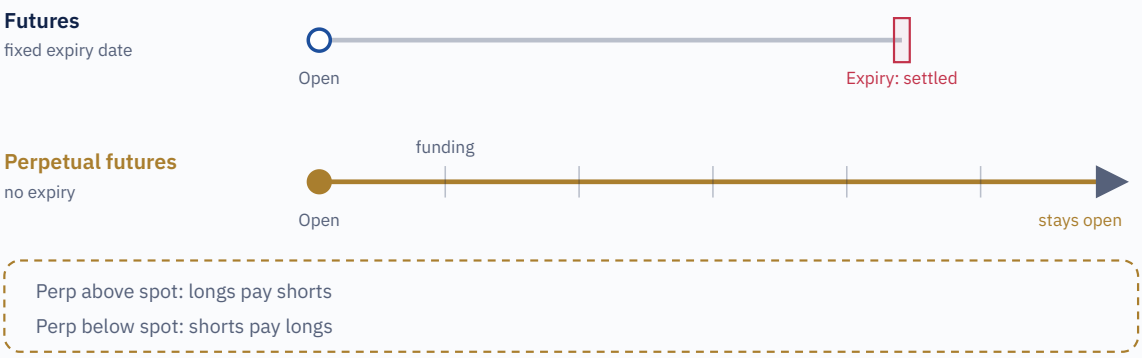


Figure 2. Futures expire and settle on a set date. Perpetuals stay open and use regular funding payments to stay close to the spot price.

EXAMPLE: PAYING FUNDING

John holds a $10,000 bitcoin perpetual position betting on a rise. Funding is +0.01% every 8 hours. At each funding time he pays $10,000 × 0.01% = $1 to traders on the other side, about $3 a day. In heated markets funding can be many times higher, and it can become a real cost of holding a position.

Going long and going short

Derivatives let you take either side of the market:

- **Long:** you profit if the price rises and lose if it falls. This is the same direction as buying spot.
- **Short:** you profit if the price falls and lose if it rises. You are selling a contract you do not own, expecting to close it later at a lower price.

Being able to short is one reason derivatives are popular: traders can try to profit in falling markets, and holders of spot coins can use a short to hedge against a drop. Shorting also has a special risk: in theory, a price can keep rising without limit, so a short position's potential loss has no natural ceiling.

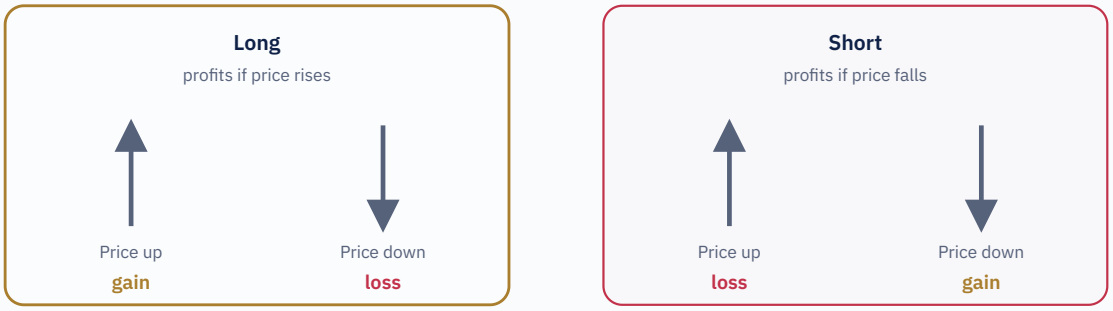


Figure 3. A long gains when the price rises; a short gains when it falls. Each loses when the price moves the other way.

Leverage: a small deposit, a large position

On a derivatives exchange you do not pay the full value of a position. You put up a deposit called **margin**, and the exchange lets you control a larger position. The ratio is the **leverage**.

With $100 of margin at 10x leverage, you control a $1,000 position. Now every price move is multiplied tenfold against your $100:

- If the price rises 5%, the position gains $50: a **50%** gain on your margin.
- If the price falls 5%, the position loses $50: a **50%** loss on your margin.

Leverage does not change the market. It changes how much of your margin each move represents. Some exchanges offer up to 100x or more on major coins, where a 1% move equals your entire margin.

$100 of margin, price moves 5%

Leverage	Position	Price +5%	Price -5%
1x	$100	**+$5 (+5%)**	**-$5 (-5%)**
5x	$500	**+$25 (+25%)**	**-$25 (-25%)**
10x	$1,000	**+$50 (+50%)**	**-$50 (-50%)**
20x	$2,000	**+$100 (+100%)**	**-$100 (liquidated)**

Figure 4. The same 5% price move with $100 of margin at different leverage. At 20x, a 5% fall uses up the whole margin.

Liquidation: when the margin runs out

If a leveraged position loses almost all of its margin, the exchange closes it automatically to stop the loss from growing beyond the deposit. This is a **liquidation**. The margin is gone, and the trader cannot wait for the price to come back.

Roughly, the higher the leverage, the smaller the move that triggers liquidation. Ignoring fees, a long at 2x is liquidated after about a 50% fall, at 10x after about 10%, and at 100x after about 1%. In practice it comes a little earlier, because exchanges keep a small buffer called the **maintenance margin** and charge fees.

Liquidations can feed on themselves. Each forced sale pushes the price further, which triggers the next group of liquidations. This is called a **liquidation cascade**.

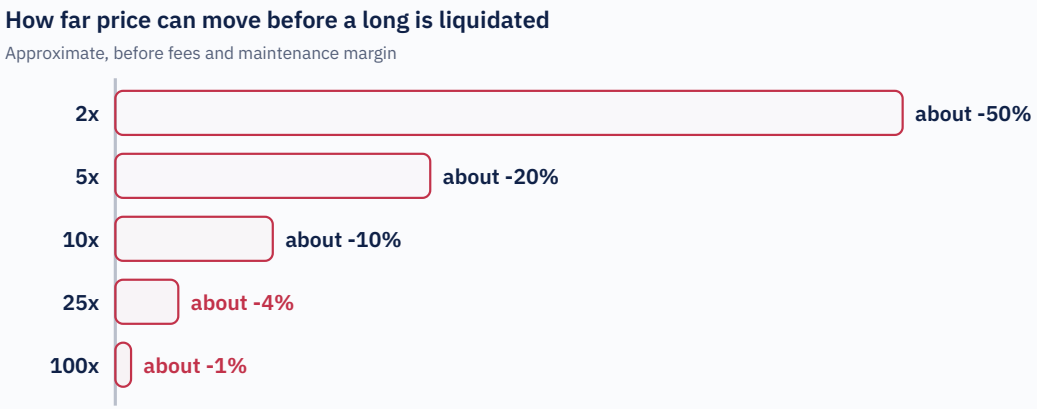


Figure 5. The higher the leverage, the smaller the price move that liquidates a position. Real liquidation comes slightly earlier because of fees and the maintenance margin.

EXAMPLE: 10 OCTOBER 2025

On 10 October 2025, a sudden sell-off triggered the largest liquidation event in crypto history. According to data reported from CoinGlass, about **$19 billion** of leveraged positions were liquidated in a single day, around 87% of them longs, affecting more than 1.6 million traders. Prices of many altcoins briefly fell far more than bitcoin as forced selling met thin order books.

Why this matters for traders

- **Derivatives often lead price.** With about 90% of volume in derivatives, short-term moves are frequently driven by leveraged positioning rather than by spot buying.
- **Funding shows crowd positioning.** Strongly positive funding means many traders are long and paying for it; strongly negative funding means the opposite. Extreme readings are watched closely because crowded positions can unwind fast.
- **Open interest shows how much leverage is in play.** Open interest is the total value of open derivative positions. Rising open interest with rising price shows new leveraged money entering.
- **Liquidation levels attract price.** Large clusters of liquidation prices sit above and below the market, and sharp moves often run through them. The members levels cover open interest, funding and liquidation maps in depth.
- **Spot and derivatives carry different risks.** A spot holder can wait out a drop; a leveraged position may be closed by liquidation before any recovery.

Key terms

Spot	Buying or selling the actual coin for immediate delivery.
Derivative	A contract whose value comes from the price of another asset.
Futures	A contract to buy or sell at a set price on a set future date.
Perpetual futures	Futures with no expiry date, kept close to the spot price by the funding rate.
Funding rate	A regular payment between long and short traders that keeps a perpetual's price near spot.
Long and short	A long profits when price rises; a short profits when price falls.
Margin	The deposit put up to open a leveraged position.
Leverage	The ratio between a position's size and its margin, which multiplies gains and losses.
Liquidation	The automatic closing of a leveraged position when its losses use up almost all of its margin.
Open interest	The total value of derivative positions that are still open.

Key takeaways

1. Spot means owning the coin; the most you can lose is what you paid.
2. Derivatives are contracts on price. About 90% of crypto trading volume in early 2026 was derivatives.
3. Futures expire on a set date. Perpetuals never expire and use funding payments to stay near the spot price.
4. A long profits from a rise and a short from a fall. A short's potential loss has no natural ceiling.
5. Leverage multiplies every move against your margin: at 10x, a 5% move is a 50% gain or loss.
6. High leverage means a small move can liquidate a position. On 10 October 2025 about $19 billion was liquidated in one day.

Test yourself

Circle one answer for each question. The answer key with explanations is on the next page. You can also take this quiz online at markettalks.info and see your score instantly.

1. What do you receive when you buy bitcoin on the spot market?

A. A contract on bitcoin's price
B. The actual bitcoin
C. A promise to receive bitcoin next month
D. A share in the exchange

2. Roughly what share of crypto trading volume in the first quarter of 2026 was derivatives, according to CoinGlass?

A. About 10%
B. About 40%
C. About 60%
D. About 90%

3. What is the main difference between futures and perpetual futures?

A Perpetuals can only be long
B Futures have an expiry date; perpetuals never expire
C Futures are only for stocks
D Perpetuals have no fees

4. A perpetual trades above the spot price and funding is positive. Who pays whom?

A Shorts pay longs
B Longs pay shorts
C The exchange pays everyone
D Nobody pays anything

5. What does a short position do?

A Profits when the price rises
B Profits when the price falls
C Holds the coin for a short time
D Avoids all fees

6. You open a $1,000 position with $100 of margin at 10x leverage. The price falls 5%. What happens to your margin?

A It falls 5%, to $95
B It falls 50%, to $50
C It is unchanged
D It rises 5%

7. Roughly how large a fall would liquidate a 10x long position, ignoring fees?

A About 1%
B About 10%
C About 50%
D About 100%

8. What is a liquidation cascade?

A. A rise in funding rates

B. Forced sales pushing the price further and triggering more liquidations

C. A new type of token launch

D. The expiry of all futures contracts

Answer key

1 B

The actual bitcoin

Spot means you pay the full price and own the coin, which you can hold or withdraw to your own wallet.

2 D

About 90%

About $18.6 trillion of the $20.6 trillion traded was derivatives. Spot was under $2 trillion.

3 B

Futures have an expiry date; perpetuals never expire

Futures settle on a set date. Perpetuals stay open indefinitely and use the funding rate instead.

4 B

Longs pay shorts

Positive funding means buyers pay sellers, which makes the crowded long side more costly and pulls the price back toward spot.

5 B

Profits when the price falls

A short gains when price drops and loses when it rises. Its potential loss has no natural ceiling.

6 B

It falls 50%, to $50

The position loses $50, which is half of your $100 margin. Leverage multiplies each move tenfold against the margin.

7 B

About 10%

At 10x, a 10% fall wipes out the margin. In practice liquidation comes slightly earlier because of the maintenance margin and fees.

8 B

Forced sales pushing the price further and triggering more liquidations

Each liquidation adds selling (or buying), which moves the price into the next cluster of liquidations, as on 10 October 2025.

SOURCES

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- Blocmates, 1.6 million traders liquidated in $19B wipeout: https://www.blocmates.com/news-posts/the-weekend-crypto-armageddon-1-6-million-traders-liquidated-in-19b-wipeout

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