

What Is Market Depth?

How much you can actually trade before the price moves — how professionals measure it, why the number on screen overstates it, and the dimension almost nobody checks.

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Market depth is the quantity of an asset available to trade at each price level around the current market — in practical terms, how much you can buy or sell before you start moving the price against yourself. It is the difference between a market that absorbs your order without noticing and one that lurches when you arrive. Most people never look at it, and those who do usually read only the headline shape of a chart. This report is about measuring it properly: the standard method professionals use to quantify it, the reasons the visible figure overstates what is really there, and the third dimension of liquidity that determines whether depth survives contact with a fast market. It assumes you know [what market liquidity is](#).

AT A GLANCE

WHAT IT IS

Quantity available near the price

MEASURED AS

Value within a % band

READ THE

Slope, not just the size

THIRD DIMENSION

Resilience — does it refill?

OVERSTATED BY

Orders that vanish on approach

ON AMMS

Pool size is not depth

01

Depth is a quantity, not an adjective

Liquidity is often discussed as though it were a single property an asset either has or lacks. Depth is the part of it you can actually count. At every price level above and below the

current market sit resting orders of specific sizes, and depth is simply the sum of those quantities — how much is on offer, and where.

Economists conventionally separate liquidity into three dimensions, and keeping them apart clarifies a great deal. *Tightness* is the cost of trading a small amount immediately, which is the bid-ask spread. *Depth* is how much you can trade before the price moves materially. *Resilience* is how quickly the market recovers after a trade disturbs it. Most retail discussion collapses all three into the word “liquid,” which is why people are repeatedly surprised: an asset can have a tight spread and almost no depth behind it, and it will look perfectly healthy right up until the moment you trade size into it. The spread tells you the entry price; depth tells you how much of that price is real.

02

How to measure it

The vague version — “the book looks thick” — is useless for comparison. The professional convention is to fix a price band around the mid-price and total the value of all resting orders inside it. You will see this expressed as depth within a percentage of the mid, or in basis points, where one basis point is a hundredth of a percent. The result is a single figure: the amount of money that can be transacted before price moves beyond that band.

Two disciplines make this usable. First, always note the band, because a depth figure without one is meaningless — the same market will show a small number in a tight band and a large one in a wide band, and comparing across different bands is comparing nothing. Second, read the two sides separately: bid-side depth is what supports you when you sell, ask-side depth is what you consume when you buy, and they are frequently very different. The most useful version of the question is personal rather than abstract: *what does my intended size cost?* Take your order size, walk it down the resting orders, and the average price you arrive at is your answer — a calculation with the same mechanics as [how order books work](#).

03

Reading the shape

A depth chart draws the same information as a curve: cumulative resting quantity on each side, plotted outward from the current price. What matters is not the height but the *slope*.

A shallow, gradual slope on both sides means quantity builds steadily as you move away from the mid — a market that absorbs orders and moves smoothly. A steep, sudden wall means most of the available quantity sits at a particular level, so price moves easily until it reaches that level and then stops dead. A chart with a wide flat gap near the mid is the warning sign: little sitting close to the market, so even a modest order travels a long way before finding a counterparty. Asymmetry is worth noting too — a thick bid side and thin ask side means the price can rise easily and falls into support, and the reverse for the opposite shape. But treat that observation carefully, which is the subject of the next section.

04

Imbalance is a weak signal

It is tempting to read an imbalanced book directionally: more bids than asks means buying pressure, therefore the price should rise. This inference is popular, intuitive, and unreliable.

Three problems undermine it. Resting orders are intentions, not commitments — they can be cancelled in the instant before they would fill, so a wall of bids may simply evaporate as price approaches. Large visible orders are sometimes placed precisely to be seen, creating an impression the placer has no intention of honouring. And the orders that actually move markets are frequently invisible: institutional participants routinely split large orders or use order types that display only a fraction of the true size, so the book you are reading may be missing the most important participant in it. Depth imbalance is best treated as one observation among many, describing the current arrangement of visible intentions rather than predicting the next move. A market can look heavily bid and fall all afternoon.

Depth measures how much is showing. It does not measure how much is real, how long it will stay, or whether it will return once consumed — and in a fast market those are the only questions that matter.

05

Resilience: the dimension nobody checks

Here is the most important idea in this report. Depth is a snapshot, and a snapshot cannot tell you what happens next. Resilience is how quickly the book refills after a trade consumes it — and two markets showing identical depth can behave completely differently on this measure.

In a resilient market, a large order eats through several price levels and market makers immediately replace those orders, so the book reconstitutes within moments and the price recovers. In a fragile one, the same order consumes the same levels and nothing comes back — the quoting parties, having just been run over, widen or withdraw, and the market is left thin and jumpy for a long stretch afterwards. The first market can absorb repeated pressure; the second breaks after one push. This is precisely why liquidity vanishes during crashes: the initial selling consumes the visible depth, and the participants who would normally replenish it step back, so the second wave of selling meets a far emptier book than the first. Depth is what you see; resilience is whether it holds — and the only way to observe it is to watch how the book behaves after large trades rather than reading its state at rest. This is the mechanical explanation behind the withdrawal described in [what is a market maker](#).

06

Why the visible figure overstates it

Several factors mean actual tradable depth is generally less than displayed depth. Orders can be cancelled faster than you can act on them, so the book is a live intention rather than a standing guarantee. Hidden and partially displayed order types mean some genuine size never appears, cutting the other way — real depth can also exceed the display, which is why estimates from visible data alone are approximate in both directions.

Two further adjustments matter in crypto specifically. Depth is *fragmented* across many venues trading the same asset, so no single book shows the whole picture, and aggregated figures depend on which venues a data provider includes. And depth is not constant through the day: even in a market that never closes, quantity thins during hours when fewer participants are active. The practical implication is to check depth on the venue you will actually trade, at a time comparable to when you will trade, rather than reading an aggregate figure and assuming it applies to you.

07

Depth on an automated market maker

Decentralised venues built on pooled pricing have no order book, so depth exists in a different form and the comparison trips people constantly. There are no resting orders to count; instead the pool's size and pricing formula determine how far the price moves for a given trade. The equivalent question is the same — how much can I trade before the price moves materially — but the answer comes from the curve rather than from stacked orders.

The common error is to read a pool's total value as depth. It is not. What matters is how much of that capital is positioned near the current price, and in designs where providers can concentrate their liquidity within chosen price ranges, two pools of identical size can offer completely different execution. A large pool with capital spread thinly across a wide range can be worse to trade than a smaller one concentrated where the price actually is — and concentrated liquidity can also fall away sharply just outside its range. The mechanism is covered in [automated market makers](#); the point for depth is simply that headline pool size answers a different question from the one you are asking.

08

Using it before you trade

The habit worth building takes under a minute. Before entering a position, look at the depth on the side you will eventually need to *exit* through — not the side you are entering on — because the exit is where thin depth does its real damage, usually in worse conditions than the entry. Walk your intended size through the book and note the average price you would receive; if that figure is unacceptable, the position is too large for the market, and the correct response is a smaller size rather than optimism.

Then hold the limits of the exercise in mind. You are reading a snapshot of visible intentions on one venue at one moment, which may be cancelled, may be incomplete, and may not refill once consumed. Depth is a far better guide than volume or a price chart, and it is still an estimate. Treat a thin book as a hard constraint on position size, treat an imbalanced one as an observation rather than a forecast, and treat the resilience question — will this depth still be here when I need it? — as the one that actually determines whether you can leave when you decide to.

“He is like a man which built an house, and digged deep, and laid the foundation on a rock: and when the flood arose, the stream beat vehemently upon that house, and could not shake it.”

LUKE 6:48

Methodology & Sources

This report explains how to measure and interpret a market property; it contains no depth figures, band widths, asset names, or venue names, all of which vary continuously by market and moment — observe current order books directly on the venue you intend to trade. The three-dimensional framing of liquidity as tightness, depth, and resilience is a long-established convention in market microstructure and is used here as an organising device. The measurement method described — totalling the value of resting orders within a stated percentage or basis-point band around the mid-price — is the standard institutional convention; figures are not comparable across different band widths, which is why no band is recommended here. The caution that order-book imbalance is a weak directional signal reflects three documented features of live books: orders may be cancelled before execution, may be placed without intent to execute, and may be partially or wholly hidden by order type. Resilience is described qualitatively as the speed at which consumed depth is replaced; it is observable only by watching book behaviour after large trades, not from a static snapshot. The contrast with automated market makers is structural: pooled venues have no resting orders, and total pool value is not equivalent to depth, particularly where liquidity providers may concentrate capital within chosen price ranges. Aggregated cross-venue depth depends on which venues a data provider includes. Nothing here is a recommendation regarding any asset, venue, or trade.