What Are Long-Term Holders (LTH)?

The patient cohort that quietly buys the bottom and sells the top — and why the label is more statistic than certainty.

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In Bitcoin on-chain analysis, a Long-Term Holder, usually shortened to LTH, is a wallet whose coins have sat unmoved long enough to be treated as patient, conviction-driven money rather than fast-moving trading capital. The term sounds like it describes a type of person—the steely diamond-hand who never flinches—but it is really a **statistical cohort**, a group defined purely by how long its coins have stayed still on the blockchain. Understanding what the label actually measures, and what it quietly gets wrong, is the difference between using it as a genuine cycle compass and mistaking it for a crystal ball.

AT A GLANCE

155
days unmoved before a coin counts as long-term

Bears
when long-term supply typically swells (accumulation)

Tops
when long-term holders historically distribute

Cohort
a coin-age statistic, not identified people

01 — The 155-day line: how a coin becomes “long-term”

The dividing line most analysts use is roughly **155 days**, about five months. A coin that has not moved from its wallet in that span is reclassified from a Short-Term Holder, or STH—newer, more trade-happy money—into the Long-Term Holder bucket. Coins younger than the threshold sit in the short-term camp; older coins graduate to the long-term one.

The number is not arbitrary marketing. It comes from studying the **spend-probability curve**, a measurement of how likely a coin is to be moved at each age. In a coin's first months it changes hands frequently, but somewhere around the 155-day mark that likelihood drops sharply and keeps falling—past that point, coins become progressively less likely ever to be sold. The threshold marks the age where a holder's behavior statistically shifts from "might sell any day" to "probably sitting tight." It is, however, still a *convention*: a coin becomes long-term at day 155 with no economic change whatsoever, and some analysts prefer a one-year cut-off or a smooth age-weighted band instead.

02 — Where the framework comes from

The long-term versus short-term split was popularized by the on-chain data firm Glassnode, but it rests on an older idea: that the blockchain timestamps every coin's last movement, so you can sort the entire supply by age. Earlier work on *coin age* and on "HODL Waves"—visualizations that color-band Bitcoin's supply by how long each slice has been dormant—laid the groundwork. Glassnode's contribution was to draw the probabilistic 155-day boundary and turn a rainbow of age bands into two clean, tradeable cohorts.

The crucial thing to hold onto is what the metric can and cannot see. It reads coin age from the public ledger with precision. It does **not** know who owns anything. A single person can hold coins across dozens of wallets, and one wallet can custody thousands of unrelated people's coins, so the "holder" in Long-Term Holder is an inference, not an identity.

03 — The cost basis: what the patient paid

One of the most useful figures attached to this cohort is its **cost basis**, the average price at which its coins were acquired—often published as the LTH realized price. Because long-term holders accumulated mostly during quieter, cheaper periods, their aggregate cost basis tends to sit well below the current market price for most

of a cycle, and it forms a slow-moving floor that markets have historically respected.

This links directly to a broader on-chain valuation anchor. Our explainer on Bitcoin realized price, the average price the entire market paid for its coins, describes the same idea applied to all holders; the long-term version simply narrows it to the patient subset. When market price trades far above the long-term cohort's cost basis, those holders sit on deep unrealized profit and the temptation to sell grows—a tension that drives the cycle behavior explored next.

04 — The cycle engine: accumulate in fear, distribute in euphoria

The reason analysts watch this cohort so closely is a pattern that has repeated across Bitcoin's history. Long-term holders tend to **accumulate during bear markets**, quietly buying cheap coins while sentiment is grim, which pushes long-term supply up toward a peak near cycle bottoms. Then, as prices climb into bull-market euphoria and new buyers flood in, these same holders **distribute**—selling into strength and handing coins to eager newcomers, which pulls long-term supply down near cycle tops.

This is the origin of the popular "smart money versus weak hands" framing: patient holders are cast as the smart money accumulating at the lows, and short-term traders as the weak hands buying the highs. It is a useful heuristic—a rule of thumb, not a law—and it deserves an honest caveat. The language describes an aggregate age-cohort tendency, not proof that any individual is clever or foolish. What is real and measurable is the **wealth transfer**: across a full cycle, coins demonstrably migrate from older, dormant wallets to younger, active ones and back again. Whether that makes one side smart is interpretation, not data.

The mechanism has a built-in time lag that is easy to miss. Because a coin needs 155 days of stillness to enter the cohort, the supply that accumulates near a bottom only *shows up* as long-term supply months later—often well into the subsequent recovery. Likewise, the coins a top-buyer purchases during euphoria do not become long-term for roughly five months, so a swelling long-term supply reading frequently reflects the conviction of the *previous* phase rather than the current one. This lag is why the cohort is far better at confirming which regime the market has been in than at calling the turn in real time, and why seasoned analysts pair it with faster signals rather than trading it alone.

> **The core signal:** rising long-term supply near lows reads as accumulation and conviction; heavy long-term distribution near highs reads as a late-cycle warning. Both are context, not commands.

05 — Reading the sell signal: LTH-SOPR

To see *when* the patient cohort is actually taking profit, analysts turn to a metric called **LTH-SOPR**—the Spent Output Profit Ratio calculated only on coins older than the 155-day line. In plain terms, it measures whether long-term holders are spending their coins at a profit or a loss. A reading above one means the coins being moved are being sold in profit; the higher the number, the fatter that profit.

Historically, macro tops have *coincided with* very elevated LTH-SOPR readings—moments when long-dormant coins suddenly move at enormous gains, a signature of patient money cashing out into euphoria. It is important to state this carefully: the relationship is a historical tendency across only a handful of cycles, not a mechanical trigger. There is no magic number that "calls" a top, and treating one as gospel is exactly the kind of false precision that gets traders hurt. It is a warning light that has flickered near past peaks, not a timer.

06 — What the metric quietly gets wrong

The long-term cohort is genuinely useful, but its flaws are real and worth naming plainly. The first is **lost and permanently dormant coins**. A large block of supply—including roughly a million coins from Bitcoin's earliest, Satoshi-era days—has sat untouched for over a decade and will almost certainly never sell. Broader estimates of truly lost coins range widely, from a few million upward depending on method, and every one of them is counted as ultra-long-term supply. That inflates the "held" figure and can make conviction look stronger than the living, willing-to-sell supply really is.

The second, and most current, is the **custody and ETF question**. Since spot Bitcoin exchange-traded funds—regulated products that hold real Bitcoin so investors can own it through a brokerage—launched, well over a million coins have moved into custodial cold storage. Because those coins rarely move on-chain, they can register as long-dormant long-term supply, even as the beneficial owners actively trade fund shares off-chain. That means the metric may increasingly

overstate genuine diamond-hand conviction. This is an active debate, not a settled fact, but it is the single most important modern caveat. Add to these the arbitrary 155-day boundary and the metric's slow, **lagging** nature—it confirms a regime after it is underway rather than predicting the next move—and the limits become clear.

A subtler distortion sits at the boundary itself. Because the 155-day line is a hard cut-off, a large tranche of coins bought during a single frenzied stretch can all cross into long-term territory within days of one another, producing a sudden jump in long-term supply that reflects the calendar more than any fresh change in conviction. Analysts who watch the raw cohort without accounting for these "maturation waves" can misread a mechanical threshold-crossing as a wave of new diamond hands. It is a reminder that the metric measures coin age with precision but translates that age into human intent only by assumption—and assumptions, however reasonable, are where on-chain reading quietly turns from measurement into interpretation.

07 — Holder or trader? The behavior beneath the label

The long-term cohort is, at heart, a data-driven portrait of a decision every market participant faces: to hold through volatility or to trade around it. We explore that choice directly in whether it is better to trade or hold crypto for the long term, and the on-chain record offers a blunt observation—the wallets that stayed still across full cycles have, in aggregate, ended up holding coins acquired far below later prices. That is not a promise the future will rhyme with the past, but it explains why the accumulation habits of this cohort draw so much attention.

08 — How to use it honestly

Used well, long-term holder data is a **slow-moving conviction gauge**—a way to read which phase of the cycle the market is likely in and whether patient money is building positions or unloading them. Rising long-term supply through a downturn suggests accumulation and a maturing base; sharp distribution into a rally suggests the late innings. It answers "what kind of hands hold the coins right now?" better than almost any other single metric.

What it is not is a timing tool or a standalone trigger. The honest approach is to read it alongside independent signals—price, realized price, and valuation

measures such as the MVRV Z-Score, which flags when the market is stretched above or below its cost basis—and to let agreement or disagreement between them shape your read. When several independent gauges point the same way, conviction is earned; when the cohort's message conflicts with the rest, that tension is itself the information. Watch the patient money, but never outsource your judgment to a five-month-old coin.

"Be patient, therefore, brothers… See how the farmer waits for the precious fruit of the earth, being patient about it, until it receives the early and the late rains."

JAMES 5:7

METHODOLOGY & SOURCES

This explainer synthesizes the standard on-chain definition of Long-Term Holders—the approximately 155-day dormancy threshold and the long-term versus short-term supply framework documented by Glassnode—together with widely reported cohort behavior across market cycles, cross-checked against multiple independent commentaries.

Behavioral claims (accumulation in bear markets, distribution near tops, elevated long-term profit-taking near peaks) are presented as historical tendencies, not guarantees. The 155-day line is flagged as a convention. Lost-coin and ETF-custody caveats reflect ongoing debates; precise supply figures are deliberately omitted rather than stated as fact. Nothing here is investment advice.

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