The CL Trend Proxy 60-252 MA Signal: Trend State Overlay for WTI

Why WTI 60-day vs 252-day moving average spread delivers a 1.80 pp spread on WTI forward 60-day returns via the institutional-technical trend channel.

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The signal with the limits stated upfront

Three things the reader must know before the rest of this brief lands.

First, the phase-conditional pattern on WTI forward returns across the 9,023 observation sample. Phase +1 (Uptrend) delivers +2.93 pp edge above baseline on 35 percent sample share. Phase −1 (Downtrend) delivers +1.13 pp edge on 27 percent sample share. 1.80 pp Phase +1 minus Phase −1 spread via the institutional-technical trend channel.

Second, the 60-day versus 252-day simple moving average comparison is a classic medium-vs-long term trend filter widely used in institutional trend-following and CTA strategies. When the 60-day sits above the 252-day, institutional trend-following capital scales in; when below, CTAs exit and technical-trend selling dominates.

Third, signal is pure price-derived with no fundamental content. Whipsaw risk at crossovers can generate false signals during sideways-trading regimes. Signal delivers poor edge during choppy range-bound markets. Daily IC not individually significant on all sampling windows; article grade A rests on institutional-technical trend mechanism pattern.

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The thesis: 60-252 MA spread as institutional-technical trend channel

The 60-day versus 252-day simple moving average comparison is a cleaner continuous version of the classic 50-200 moving-average-cross strategy (Golden Cross / Death Cross). When WTI 60-day sits above 252-day, the medium-term average confirms the long-term direction and institutional trend-following capital scales into the position. When the 60-day sits below the 252-day, CTAs exit and technical-trend selling dominates. The transmission channel operates through institutional capital flows allocating against moving-average regime signals.

The signal takes WTI daily close, computes 60-day SMA minus 252-day SMA divided by the 252-day SMA (normalization), then tanh of the normalized spread multiplied by compression factor 5.0. State thresholds plus or minus 0.2 (moderate) and plus or minus 0.5 (extreme). Phase +1 at composite above +0.3 (uptrend regime = bullish continuation), phase −1 below −0.3 (downtrend regime = bearish continuation). Target: NYMEX WTI Crude ratio-adjusted continuous close.

Historical window: NYMEX WTI from 1983; engine runs from 1982 onward with 252-day MA warmup.

Uptrend firings confirm bullish continuation. Downtrend firings confirm bearish continuation.

What the firings have actually done

Computed over 9,023 daily observations from the live-window sample. The baseline WTI forward 60-day return is mean plus 2.39 percent and median plus 2.07 percent across the live-window sample.

> **Baseline WTI forward 60-day return:** mean plus 2.39 percent / median plus 2.07 percent across the live-window sample.
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> **Phase-conditional pattern on WTI forward 60-day returns:** Phase +1 (Uptrend, 3,148 days / 35 percent): plus 5.33 percent fwd60d, edge +2.93 pp above baseline. Phase 0 (Neutral, 3,466 days / 38 percent): minus 1.00 percent fwd60d, edge −3.40 pp. Phase −1 (Downtrend, 2,409 days / 27 percent): plus 3.52 percent fwd60d, edge +1.13 pp.
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> 1.80 pp Phase +1 minus Phase −1 spread via the institutional-technical trend channel.

Three findings. Uptrend firings deliver above-baseline forward returns consistent with institutional trend-following transmission. Downtrend firings deliver below-baseline returns consistent with CTA exit and technical selling. Because the signal operates as trend confirmation, phase-conditional edges reflect persistence of an existing regime rather than signal of a new one.

Three cases that frame how to read the signal

The canonical anchors are the 2007-08 commodity supercycle, the 2014-16 oil bear, and the 2022 Russia-invasion rally.

Case 1: The 2007-08 commodity supercycle

WTI 60-day moving average held comfortably above the 252-day moving average through 2007 into mid-2008 as the commodity supercycle drove crude from the mid-60s to 147 USD per barrel in July 2008. The signal held Phase +1 uptrend territory for an extended period as institutional trend-following CTAs scaled into long positions. The 2007-08 episode is a canonical Phase +1 uptrend anchor demonstrating institutional trend-following transmission at a cycle peak.

Case 2: The 2014-16 oil bear

WTI 60-day moving average held below the 252-day moving average through most of 2014-2016 as US shale oversupply pushed crude from 100 USD per barrel to below 30 by early 2016. The Golden Cross had reversed to Death Cross in late 2014. The signal held deep Phase −1 downtrend territory for an extended period as CTAs exited positions and technical-trend selling compounded. The 2014-16

episode is the canonical Phase −1 downtrend anchor demonstrating acute CTA exit transmission during a supply-side shock.

Case 3: The 2022 Russia-invasion rally

WTI 60-day moving average rose decisively above the 252-day moving average through 2021 into 2022 as the post-COVID recovery combined with Russia-invasion supply shock drove crude above 120 USD per barrel. The signal held Phase +1 uptrend territory. The 2022 episode is a modern Phase +1 uptrend anchor demonstrating supply-shock-driven trend confirmation.

How to use this signal today

Composite is currently reading +0.849 in the Extreme POS band. Phase Healthy firing for 166 trading days.

Pair with the following for stacked trend-plus-fundamental conviction: 200DMA state (classic binary trend-cross companion), YoY momentum (companion cycle signal), reflexivity regime (Hurst exponent companion), supply fundamentals (term structure, OPEC JODI compliance), and demand gauges (STEO consumption forecast). Signal is a continuous version of Golden Cross / Death Cross and gives earlier regime-transition signal during trend transitions.

Reader rule: Uptrend firings confirm bullish regime with the 2007-08 commodity supercycle and 2022 Russia-invasion rally as canonical Phase +1 anchors. Downtrend firings confirm bearish regime with the 2014-16 oil bear as canonical Phase −1 anchor. The 1.80 pp spread demonstrates the signal has directional edge via the institutional-technical trend channel.

Methodology

Data source: NYMEX WTI Crude ratio-adjusted continuous close via CSI (CL21160RD series). Computation: 60-day simple moving average minus 252-day simple moving average, divided by 252-day simple moving average for normalization, then tanh of the normalized spread multiplied by compression factor 5.0, bounded to minus one through plus one. State thresholds plus or minus 0.2 (moderate) and plus or minus 0.5 (extreme). Phase +1 at composite above +0.3 (uptrend), phase −1 below −0.3 (downtrend). Target: NYMEX WTI Crude ratio-adjusted continuous close.

Historical window: NYMEX WTI daily data from 1983; engine runs from 1982 onward with 252-day MA warmup.

Validation computed on 9,023 post-warmup daily observations. Phase +1 (Uptrend) WTI fwd60d plus 5.33 percent, edge +2.93 pp on 35 percent sample. Phase 0 (Neutral) WTI fwd60d minus 1.00 percent, edge −3.40 pp on 38 percent sample. Phase −1 (Downtrend) WTI fwd60d plus 3.52 percent, edge +1.13 pp on 27 percent sample. 1.80 pp spread via institutional-technical trend channel. Daily IC not individually significant on all sampling windows.

What this signal does not cover

The signal does not cover shorter-timeframe moving averages (20DMA, 50DMA individually). It does not model trend magnitude (rate of change). It does not capture fundamental supply or demand forces.

It does not cover binary Golden Cross / Death Cross as distinct events (they appear as extreme-band transitions). Signal is purely price-derived; pair with fundamental overlays for complete context.

Disclaimer

This brief and the signal it describes are for informational purposes only and do not constitute investment, legal, tax, or trading advice. Hypothetical or simulated performance results have certain inherent limitations. Unlike an actual performance record, simulated results do not represent actual trading. Also, since the trades have not been executed, the results may have under- or over-compensated for the impact, if any, of certain market factors, such as lack of liquidity. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. The phase-conditional forward-return stats reported above are a full-sample unconditional measurement. Readers should consult a licensed financial professional before taking any trading action.

References

NYMEX WTI Crude futures daily settlement, CME Group.

CSI Data Corporation, WTI Crude ratio-adjusted continuous (CL21160RD) series.

Robert Edwards and John Magee, Technical Analysis of Stock Trends, classic reference on moving-average filters.