SI ES-to-SI US Equity Dual-Use Spillover

US equity volatility spills into silver through industrial dual-use channels; the signal flags the rare windows when ES-to-SI spillover becomes active.

David Stendahl · Market Lab Analytics · November 6, 2026

What this signal is

Silver carries industrial dual-use exposure to US corporate capital expenditure. During high-vol US equity windows (COVID, banking stress), the ES-to-SI spillover channel becomes active and silver responds with amplified directional moves. The signal is sparse by design and fires only in those windows.

The composite is bounded between minus one and plus one through tanh. On 2020-03-26 it reached its series maximum plus 0.807 and on 2020-03-16 its series minimum minus 0.631.

Today the composite reads near +0.02. See live page for current state.

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How the inputs compose

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The engine also computes four confirming features: five-day velocity, 60-day volatility regime, 60-day correlation with silver returns, 63-day lag-1 autocorrelation.

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What the state-conditional returns have actually done

The silver forward-60-day return baseline (unconditional) is mean plus 1.26 percent, median minus 0.37 percent.

> **Reference baseline (3,663 silver-aligned forward-60-day windows over the live engine window)**

> Silver forward-60-day return baseline: mean plus 1.26 percent, median minus 0.37 percent. Phase 0 source: Z13042 engine parquet joined with COMEX silver back-adjusted continuous closes.

Spillover active positive (Phase +1), 17 trading days, returned on average plus 7.52 percent.

Normal (Phase +0), 3,626 trading days, returned on average plus 1.15 percent.

Spillover active negative (Phase –1), 25 trading days, returned on average plus 4.66 percent.

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Three cases that frame how to read the signal

Case 1: 2020-03 composite series maximum

On 2020-03-26 the composite reached its series maximum plus 0.807. Silver subsequent 60-day behavior aligned with the spillover active positive regime pattern.

Case 2: 2020-03 composite series minimum

On 2020-03-16 the composite reached its series minimum minus 0.631. Silver subsequent 60-day behavior aligned with the spillover active negative regime pattern.

Case 3: March 2020 COVID shock window

The March 2020 COVID liquidity shock drove violent regime shifts across silver drivers. The composite oscillated as the underlying mechanism repriced.

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How to use the signal today

This is a regime detector on a 60-day forward horizon.

Three best uses. First, as a regime filter for silver exposure (Phase +1 equals spillover active positive). Second, as a cross-check against positioning and price-momentum signals. Third, as a transition-window warning, pairing with price-based signals for conviction.

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Methodology notes

Silver carries industrial dual-use exposure to US corporate capital expenditure. During high-vol US equity windows (COVID, banking stress), the ES-to-SI spillover channel becomes active and silver responds with amplified directional moves. The signal is sparse by design and fires only in those windows.

The 2012 start reflects the earliest reliable source coverage.

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What this signal does not cover

Four caveats. The signal is a regime detector, not a timing signal. State-conditional means hold on average, not for every individual window. Regime persistence varies with macroeconomic backdrop.

Individual windows can run much longer or shorter than mean sample. State-conditional edges are backward-looking empirical averages. Future regimes may differ. The baseline is COMEX silver back-adjusted continuous (SI_1240BD). Spot silver and ETF returns differ modestly.

Not investment advice. Signal readings and empirical statistics are derived from publicly available data sources. (c) 2026 David Stendahl.