SIGNAL RESEARCH NOTE

Long-Horizon Bubble Instability

Long-horizon bubble-instability ranking across liquid macro futures proxies.

Lppl Bubble Instability | Secondary research | 21d preferred horizon

Executive Summary

This note summarizes historical rank evidence for Long-Horizon Bubble Instability. Metrics are reported as research diagnostics under the source-run assumptions and should be read as evidence about ranking behavior, not as a live recommendation.

Preferred horizon	21d
Top-bottom spread	1.70%
Rank IC	0.024
Long-leg return	n/a
Average turnover	n/a

1. The preferred diagnostic horizon is 21d, where the recorded rank spread is 1.70%.
2. Spread evidence is strongest around the 63d horizon in the available comparison set.
3. Rank IC is positive in the reported research run at 0.024.

Data and Research Setup

UNIVERSE

Liquid futures proxies spanning equity index, rates, FX, energy and metals.

INPUTS

Daily closing-price histories aggregated into monthly cross-asset research observations.

CADENCE

Monthly ranking review with 21d and 63d forward diagnostics.

COMPARISON BASIS

Comparisons use the same universe and source assumptions inside each run. The note excludes instrument-level lists and live recommendations.

The source files were used for historical research extraction only. This note does not include instrument-level lists or position-level recommendations.

Signal Methodology

Without disclosing the exact functional, the construction proceeds along three conceptual steps.

1. **Signal measurement.** Measures relative instability in long-horizon price trajectories across liquid macro futures proxies.

2. **Cross-sectional ranking.** Ranks exposures by the strength of the instability diagnostic at each monthly observation.

3. **Horizon evaluation.** Evaluates whether the ordering is coherent across the reported forward horizons and sample splits.

> The description is intentionally conceptual. Formula details, exact construction rules and implementation parameters are not disclosed.

Results and Horizon Context

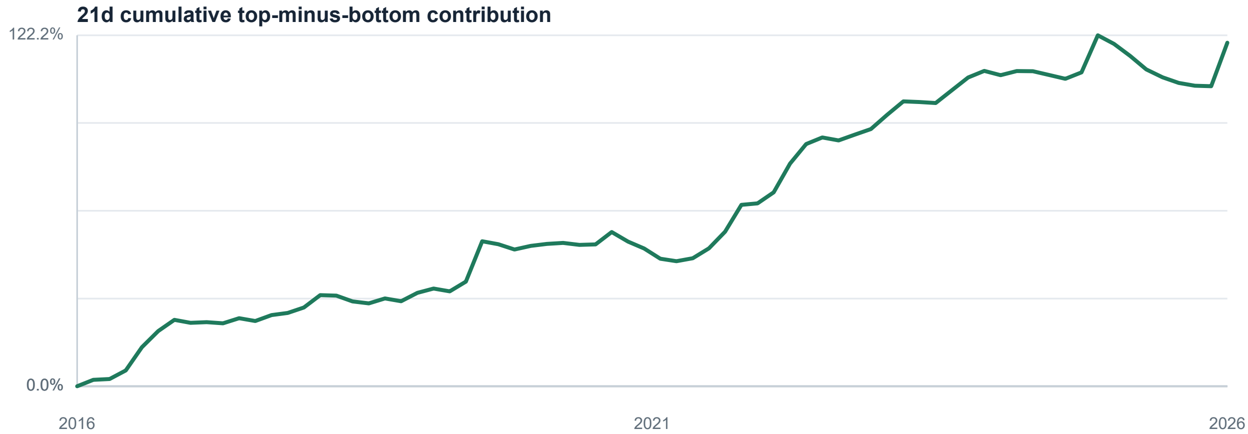

Figure 1. Cumulative 21d top-minus-bottom rank-spread contribution. Long-horizon forward observations can overlap, so the series should be read as a ranking diagnostic, not as a standalone portfolio NAV.

Figure 2. Spread profile across the tested horizons available in the source validation summary.

Horizon	Rank spread	Rank IC	Long-leg return	Turnover
21d	**1.70%**	**0.024**	**n/a**	**n/a**
63d	2.99%	0.017	n/a	n/a

Stability and Robustness

Figure 3. Rank-IC evidence across the available horizon set. Where only one horizon is available, the chart should be read as a compact evidence marker.

The available horizon evidence is coherent enough for a research note.

Positive-year fraction	**n/a**
Universe size	**15**
Validation dates	**121**

Research Interpretation

ROLE IN RESEARCH LIBRARY

Cross-asset risk diagnostic inside the research library.

WHAT IT CAPTURES

Relative long-horizon price instability across liquid macro futures proxies.

KNOWN LIMITATIONS

Proxy instruments and overlapping forward windows make the result diagnostic; they do not establish contract-level implementation or a standalone portfolio.

The evidence supports retaining the signal in the research library where it can be compared with related components under the same assumptions.