SIGNAL RESEARCH NOTE

Uncertainty-Gated Return Rank

Out-of-fold equity return ranking adjusted for predictive uncertainty.

Gpu Probabilistic Return Forecasting | Secondary research | 21d preferred horizon

Executive Summary

This note summarizes historical rank evidence for Uncertainty-Gated Return Rank. 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	**0.13%**
Rank IC	**0.001**
Long-leg return	**1.40%**
Average turnover	**72.06%**

1. The preferred diagnostic horizon is 21d, where the recorded rank spread is 0.13%.

2. Rank IC is positive in the reported research run at 0.001.

3. The signal is best read as a research-library ranking component, not as a standalone product.

Data and Research Setup

UNIVERSE

A fixed broad panel of 3,000 liquid global equities used by the out-of-fold source run.

INPUTS

Dated, lag-safe equity features, daily closing prices and expanding out-of-fold model estimates.

CADENCE

Monthly cross-sectional ranking review at a 21d forward research horizon.

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.** Combines expected-return evidence with a separate assessment of predictive uncertainty.

2. **Cross-sectional ranking.** Ranks equities cross-sectionally so more confident return estimates receive greater emphasis.

3. **Horizon evaluation.** Evaluates the ordering through expanding out-of-fold estimates, chronological splits and style controls.

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

Results and Horizon Context

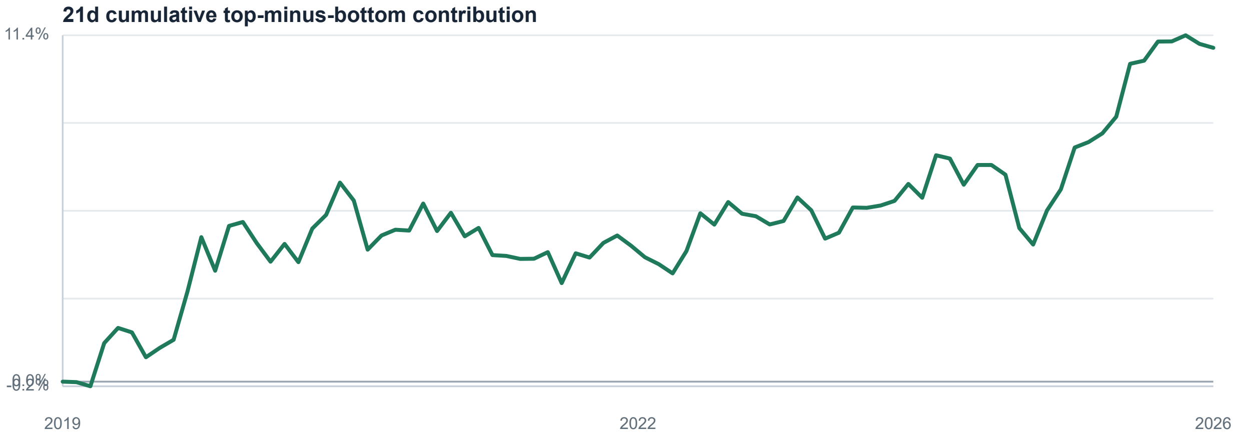

Figure 1. Cumulative 21d top-minus-bottom rank-spread contribution. Long-horizon forward observations can overlap, so the series should be read as a ranking diagnostic, not as a standalone portfolio NAV.

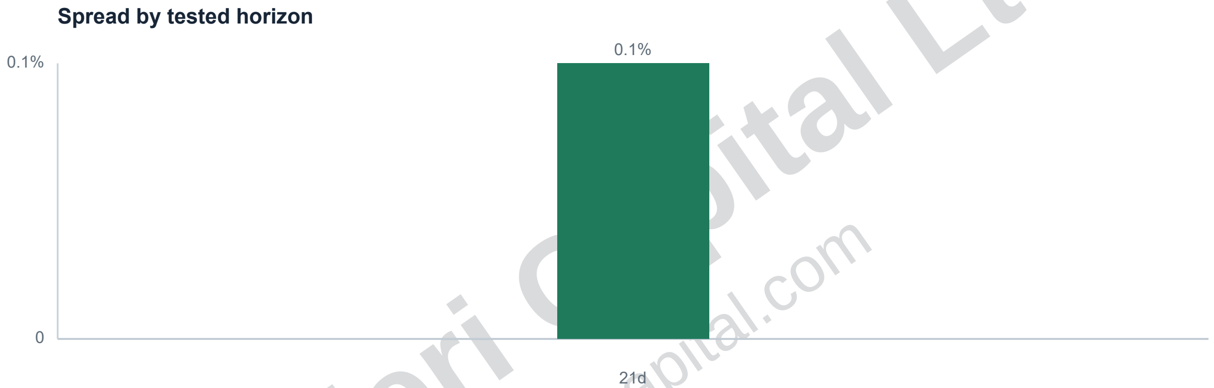

Figure 2. Spread profile across the tested horizons available in the source validation summary.

Horizon	Rank spread	Rank IC	Long-leg return	Turnover
21d	0.13%	0.001	1.40%	72.06%

Stability and Robustness

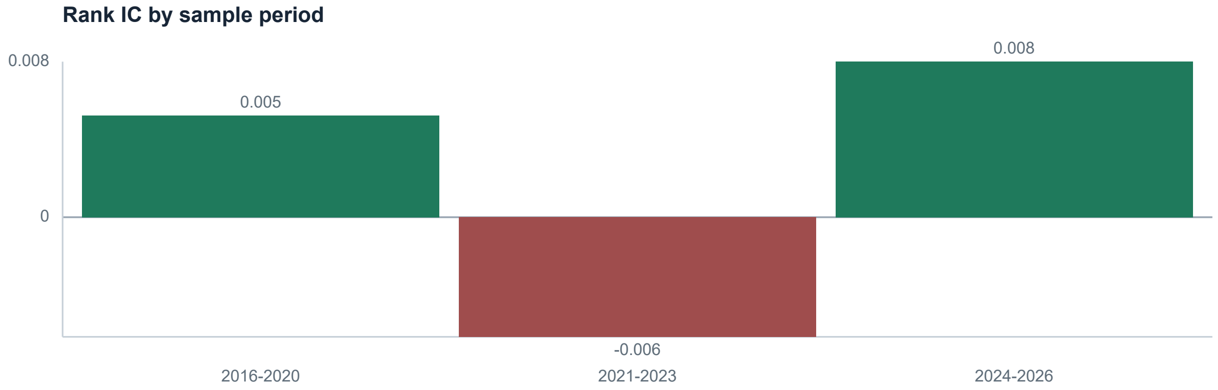

Figure 3. Rank-IC evidence across chronological sample periods from the source OOS audit.

The recorded spread is positive in 2 of 3 chronological sample periods.

Positive-year fraction	**n/a**
Universe size	**3,000**
Validation dates	**83**

Research Interpretation

ROLE IN RESEARCH LIBRARY

Secondary probabilistic equity-ranking challenger inside the research library.

WHAT IT CAPTURES

Cross-sectional return evidence after reducing the influence of relatively uncertain model estimates.

KNOWN LIMITATIONS

The source run covers 83 validation dates, includes one negative chronological period and is highly sensitive to conservative turnover costs.

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