



ORTEX RESEARCH · BACKTEST BRIEF

\$1,000 → \$24,596 in 16.3 years. What score-driven stock selection has shown historically.

Two long-only S&P 500 strategies, picked by ORTEX stock-score ranking each month, outperformed the S&P 500 Total Return Index by 1.9× and 2.9× in a 16.3-year historical, point-in-time simulation.

Since 2010, two model portfolios that we run on the ORTEX Backtester — using nothing but our daily composite stock score to pick top-ranked S&P 500 names — have turned every \$1,000 of starting capital into \$16,358 and \$24,596 in historical simulation. Over the same 16+ years, \$1,000 in the S&P 500 Total Return Index grew to \$8,642.

BALANCED STRATEGY

+1,536%

CAGR 18.7% · Sharpe 1.14 ·
alpha +5.7% (vs S&P TR)

SHORT MOMENTUM
STRATEGY

+2,360%

CAGR 21.7% · Sharpe 1.12 ·
alpha +6.3% (vs S&P TR)

S&P 500 TOTAL RETURN
INDEX

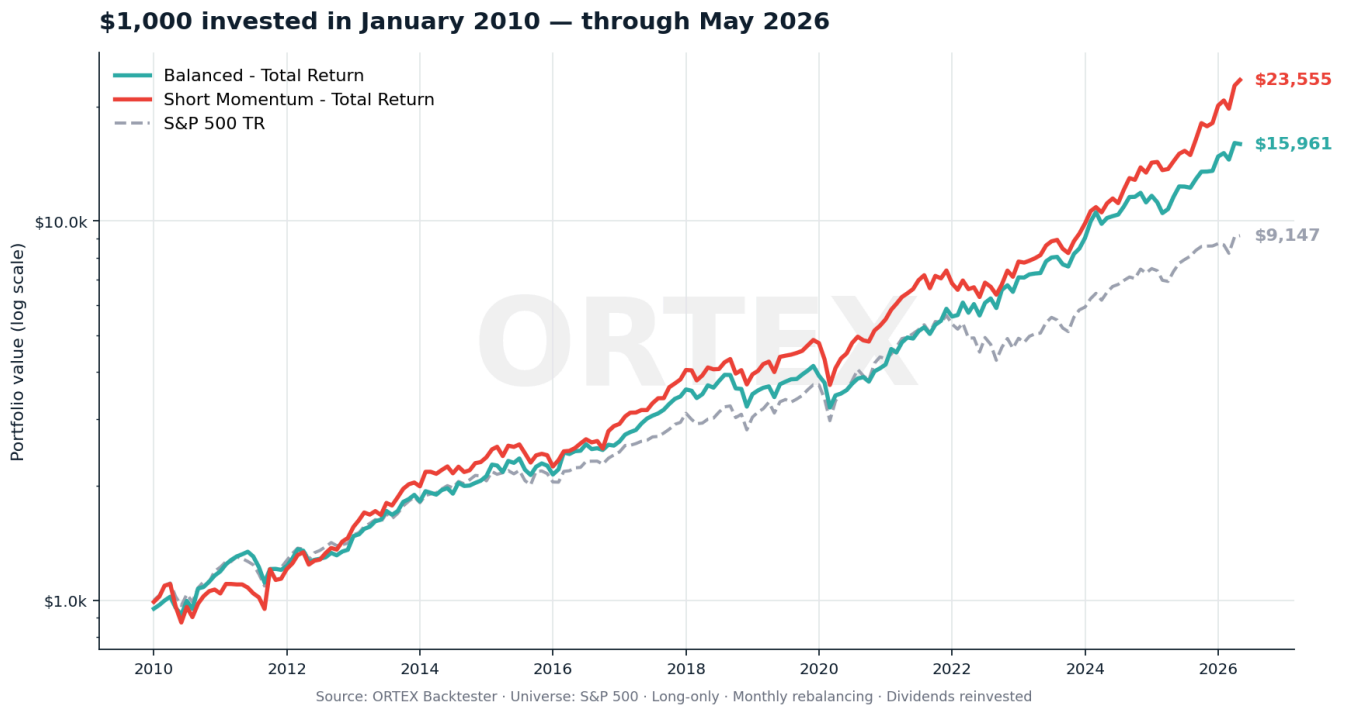
+764%

CAGR 14.1% · Sharpe 0.90

Want this data for your own model?

The same composite stock scores that drive these strategies are available to ORTEX subscribers via our API. **Pull current and historical scores at docs.ortex.com**, build your own factor blend, and run your own backtest. Beat our weights and you've built a better strategy than the one in this brief.

The chart that tells the story

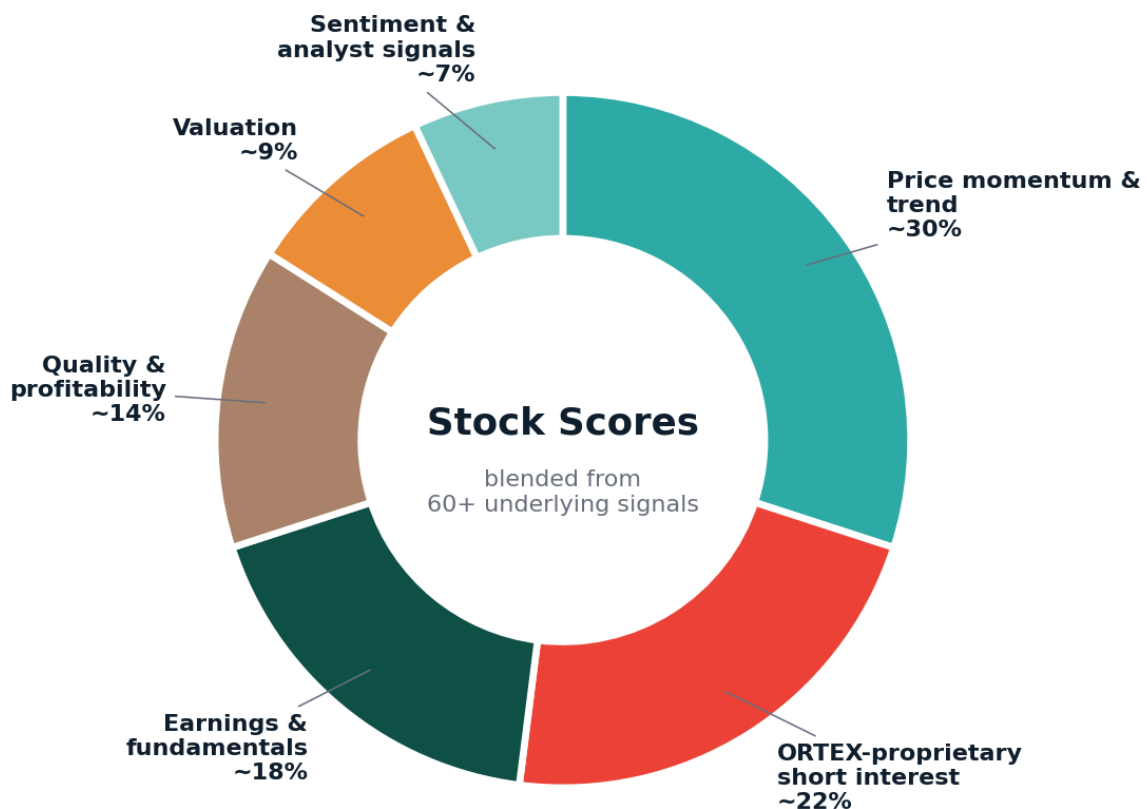


\$1,000 invested in January 2010 in each strategy, against the S&P 500 Total Return Index (log scale, dividends reinvested).

Short Momentum has compounded at **21.7% a year** over the 16.3-year test window, vs 14.1% for the S&P 500 Total Return Index.

What's actually inside an ORTEX stock score

What goes into an ORTEX Stock Score



Illustrative category mix. Strategies blend dozens of underlying signals with ORTEX-proprietary short-interest data alongside fundamentals.

A composite of ~60 underlying signals across six categories. Specific weights and formulas are proprietary.

Every name in our universe is scored daily by blending dozens of fundamental, technical, sentiment and ORTEX-proprietary short-interest signals into a single composite ranking. That number answers one question: *how does this stock look **right now**, versus everything else, on every dimension that matters?*

The score draws from six broad categories totalling ~60 underlying signals. A handful are familiar from any quant playbook — price momentum, earnings growth, valuation. The rest is what makes the ORTEX score different. Most of the signal mass comes from data layers that are **only available inside ORTEX**:

- **Proprietary short-interest data** updated daily — composite short score, days-to-cover, short availability, free-float on loan, change rates. The most-watched short-interest dataset in the market, derived from real flows rather than estimated from public filings.
- **ORTEX-derived quality, momentum and value ML signals** — learned cross-sectional rankings that complement the rule-based factors.
- **Daily-updated analyst and sentiment signals** — analyst recommendation changes, target-price revisions, consensus shifts, dividend signals — pulled and normalised across the full S&P 500 universe in one place.

- **Quality and profitability factors derived from cleaned point-in-time fundamentals** — ROCE, ROE × earnings retention, F-score, margin stability — lagged to publication date so there is no look-ahead.

Of those six categories, the value/valuation block is the only one that overlaps cleanly with what most retail screening tools already give you. Everything else is where the alpha lives — and that is the part that does not exist outside ORTEX.

Two strategies, one engine

Both portfolios are run on the same ORTEX Backtester, on the same universe (S&P 500), long-only, rebalanced monthly with dividends reinvested. They differ only in **which factors they emphasise**:

Strategy DNA — where each model puts its weight



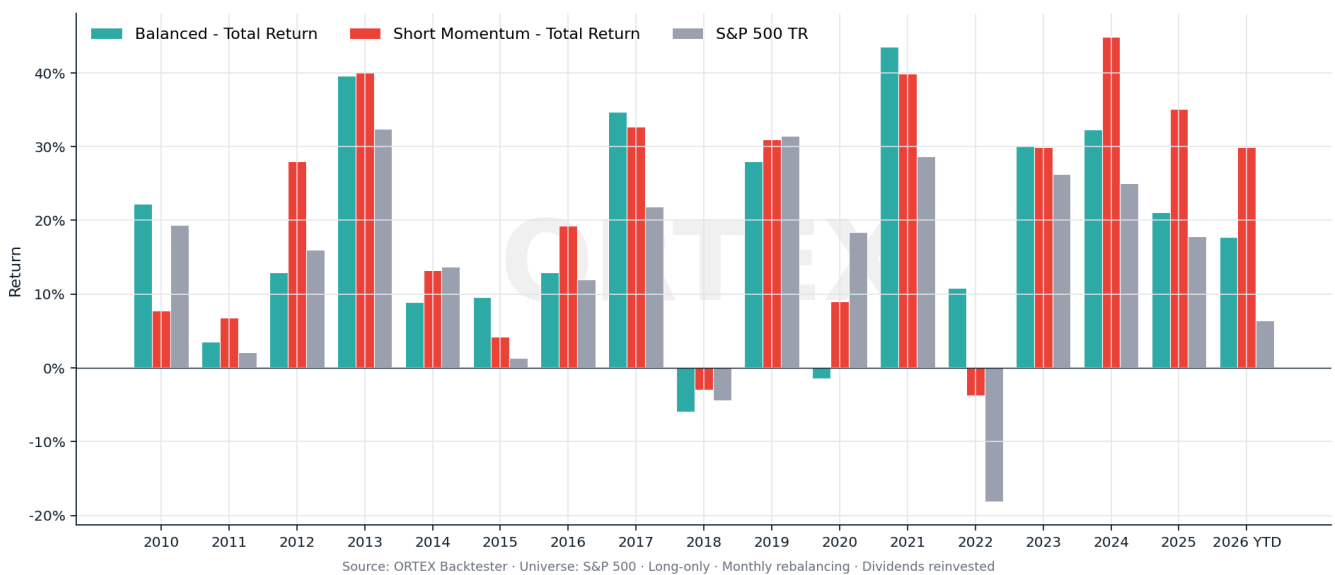
Indicative factor-category emphasis. Specific weights and signals are proprietary.

Indicative factor-category emphasis. Specific weights and signals are proprietary.

- **Balanced — Total Return** holds the top 25 names by composite score with diversified factor exposure across all six categories. It's the all-weather build.
- **Short Momentum — Total Return** holds the top 20 names and concentrates emphasis on price-trend signals plus ORTEX-proprietary short-interest data. It's designed to ride names that combine an established uptrend with elevated short pressure — historically a powerful combination for forward returns.

Year-by-year, the strategies just keep showing up

Calendar-year returns (final year YTD through May 2026)

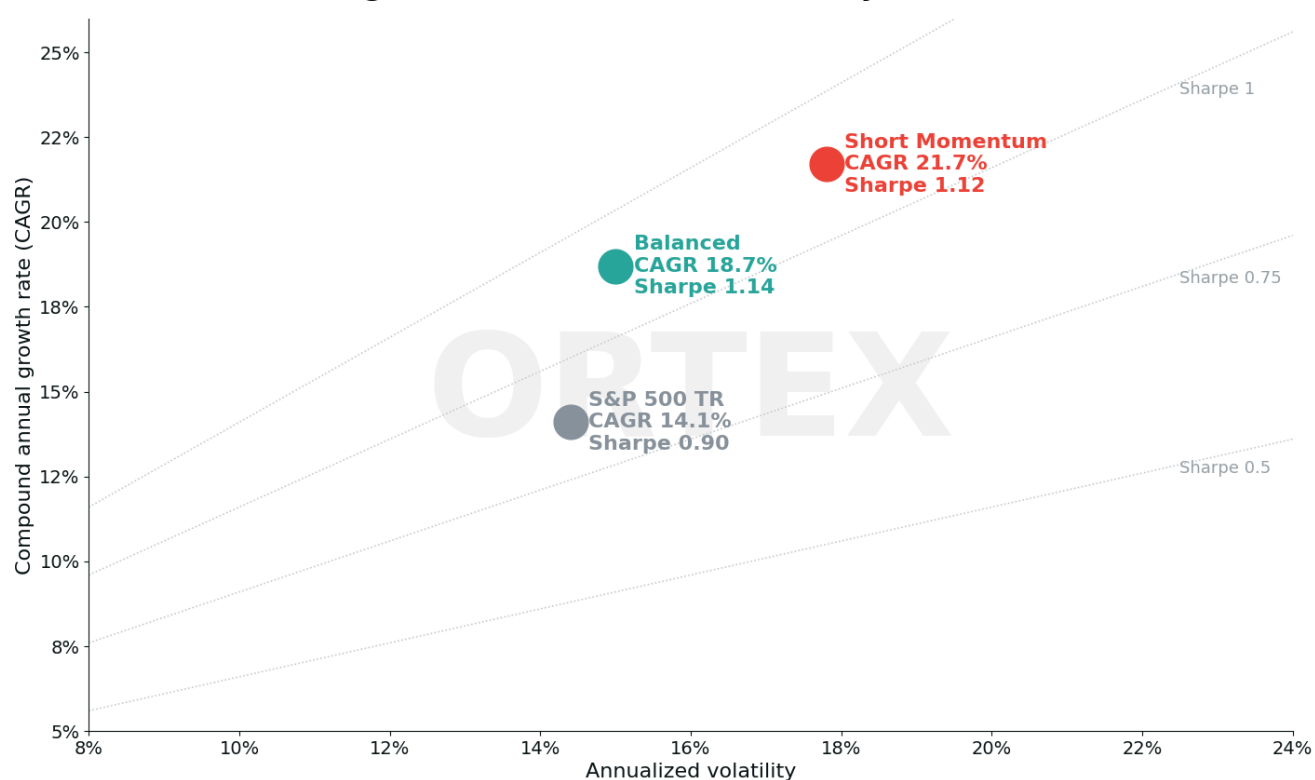


Calendar-year total returns. The 2026 bar is YTD through May 6 — not a full year.

What makes the strategies compound so well isn't a single moonshot year — it's a long string of years where they meaningfully beat the benchmark. **2013, 2017, 2021, 2024** were standout years (+30 to +45% for Short Momentum). 2018 and 2022 were the only down years for the strategies, and 2022 was less negative than the index.

Higher absolute returns at comparable risk-adjusted rates

Risk vs return: higher returns and better risk-adjusted rates



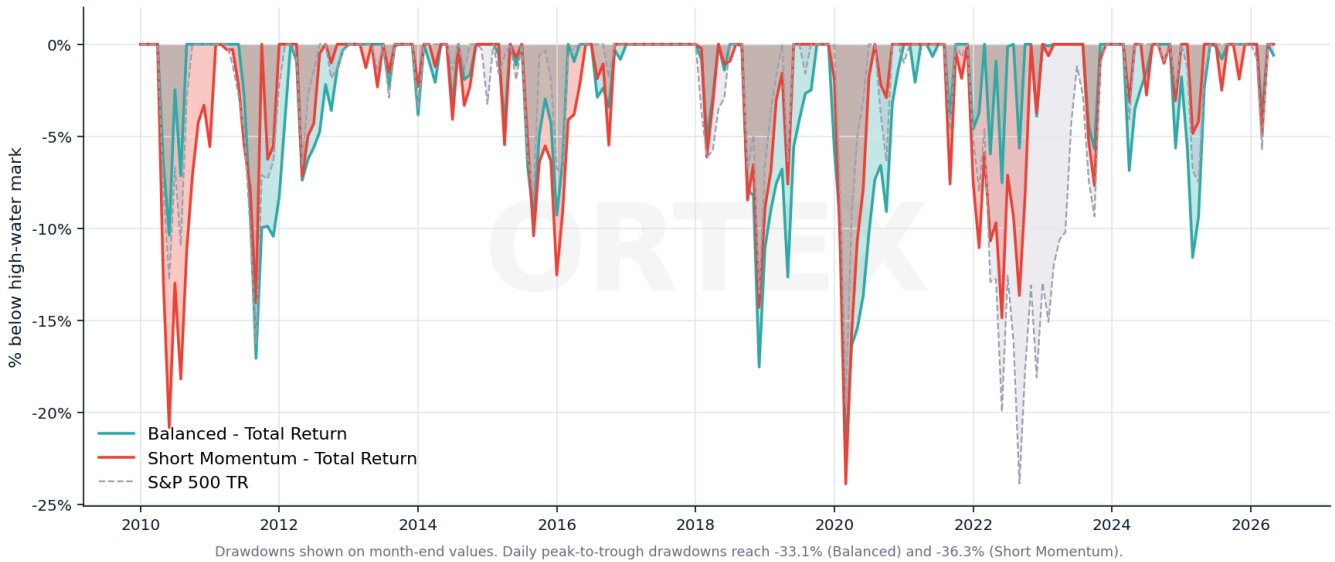
Source: ORTEX Backtester · Universe: S&P 500 · Long-only · Monthly rebalancing · Dividends reinvested · Sharpe vs 3M T-bill (~1.6%), monthly convention

Risk vs return over the full 16.3-year sample. Iso-Sharpe lines shown for reference.

The natural pushback on big return numbers is “okay, but how much risk did you take?” Volatility on the Balanced strategy is roughly *in line* with the index (15.0% vs 14.4%); Short Momentum runs a little higher (17.8%). Sharpe ratios are above the benchmark — 1.14 and 1.12 vs 0.90 for the S&P 500 TR over this unusually strong period — meaning the higher absolute returns came with proportionally more risk, not fundamentally better risk-adjusted performance. In a single-factor regression against the S&P 500 TR, both strategies still produce positive annualised intercepts (alpha of 5.7% and 6.3%) with beta close to or below one, so they earned more dollars than their beta would imply. Further factor-attribution work would be needed to isolate the proprietary-signal contribution from standard momentum, quality, sector and size exposures.

Drawdowns: not painless, but recoverable

Drawdowns from peak (monthly)



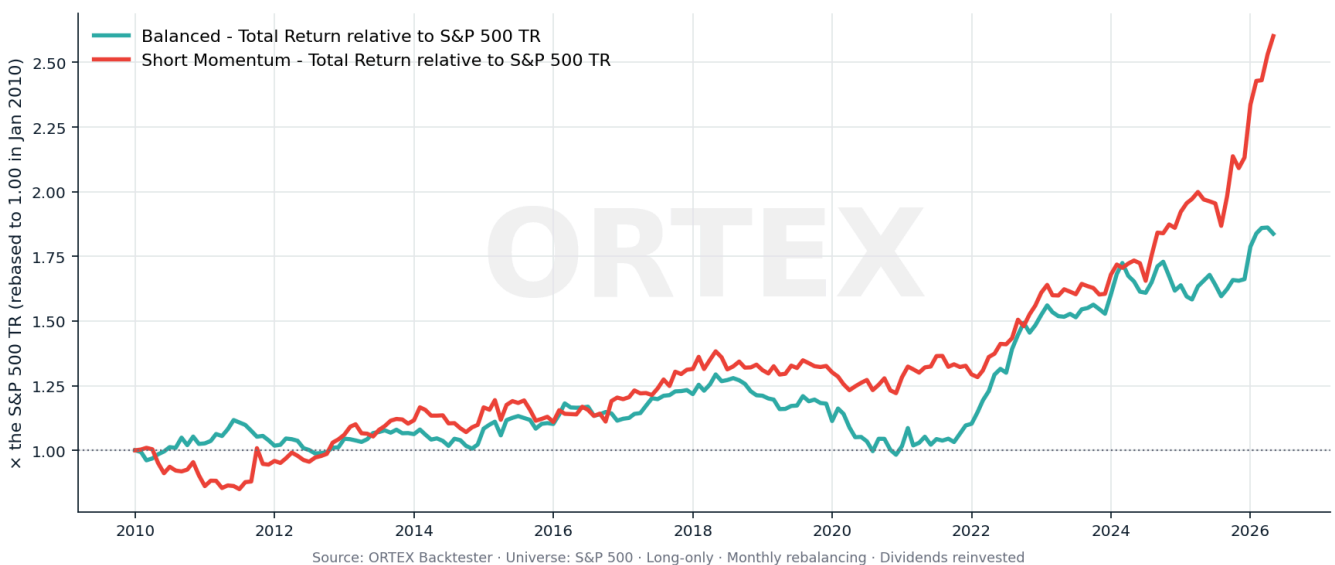
Drawdowns measured on month-end values. Daily peak-to-trough drawdowns hit -33% to -36% in 2020.

Both strategies hit their max drawdown during the **COVID-19 crash of March 2020**, alongside everything else in the world — -33.1% for Balanced, -36.3% for Short Momentum, -33.7% for the S&P 500 TR. By year-end 2020, both strategies had recovered all of it and then some.

Score-driven strategies don't dodge market crashes. The historical backtest does show faster recovery periods after several major drawdowns, consistent with the strategy rotating each month into stronger-ranked names rather than holding the full index.

Pure outperformance, in one line

Outperformance multiple - strategy value divided by S&P 500 value



Strategy value divided by S&P 500 Total Return Index value, both rebased to 1.00 in January 2010.

This is the single cleanest view of benchmark-relative compounding. It shows what a dollar invested in each strategy would be worth *relative to a dollar in the Total Return Index*. A flat line at 1.00 would mean tracking the index. Above 1.00 means the strategy has compounded more dollars per dollar invested.

By May 2026, the Balanced strategy is worth **1.89×** the S&P 500 TR and Short Momentum is worth **2.85×**. That is the historical effect of applying the score systematically over the test window.

Technical scorecard

For anyone evaluating a quantitative strategy, the question is never just *how much did it return?* The table below adds the metrics most often used alongside CAGR. **Alpha** measures absolute return after stripping out beta-implied market exposure; **information ratio** measures the consistency of relative performance; **Sortino** measures downside volatility; **Calmar** measures the relationship between return and drawdown. Together they help separate the size of the return from market sensitivity, consistency, downside risk and drawdown severity.

Metric	Balanced	Short Momentum	RSP EW proxy	S&P 500 TR
Total return (gross)	+1,536%	+2,360%	+565%	+764%
CAGR (gross)	18.7%	21.7%	12.3%	14.1%
Final value of \$1,000	\$16,358	\$24,596	\$6,646	\$8,642
Multiple of S&P TR dollars	1.89×	2.85×	0.77×	1.00×
Annualised volatility	15.0%	17.8%	15.7%	14.4%
Annualised alpha vs S&P 500 TR	+5.7%	+6.3%	-2.0%	0.00%
Annualised alpha vs S&P 500 EW	+8.2%	+9.4%	0.00%	—

Metric	Balanced	Short Momentum	RSP EW proxy	S&P 500 TR
Beta to S&P 500 TR	0.89	1.04	1.04	1.00
Information ratio (vs TR)	0.47	0.67	—	—
Tracking error (annualised)	7.9%	9.6%	4.9%	—
Sharpe ratio (Rf \approx 1.6%, 3M T-bill)	1.14	1.12	0.74	0.90
Sortino ratio (downside-only)	1.17	1.21	—	—
Calmar ratio (CAGR / max DD)	0.56	0.60	0.31	0.42
Max daily drawdown	-33.1%	-36.3%	-39.0%	-33.7%
Max drawdown date	Mar 2020	Mar 2020	Mar 2020	Mar 2020
Years beating S&P 500 TR (of 16)	12 (75%)	13 (81%)	6 (38%)	—
Months beating S&P 500 TR	54%	56%	47%	—
Holdings	25	20	~500	500
Rebalance	Monthly	Monthly	Quarterly	—

Period: 2010-01-04 → 2026-05-06 · 4,107 trading days · 16.33 years (2026 partial / YTD). All figures are gross of transaction costs unless explicitly noted.

How to read those numbers

Alpha > 0 means the strategy earned more than its beta-implied share of the market. The alpha figures shown are vs *both* the cap-weighted S&P 500 TR and the equal-weighted variant — both are positive — so the result is not simply “equal-weighting a top-N S&P portfolio”. **Information ratio above 0.5** is generally considered respectable; above 1.0 is exceptional. The strategies sit between 0.47 and 0.67 versus the cap-weighted TR benchmark and higher than that versus equal weight. A full factor-attribution exercise (vs momentum, quality, size, value and low-volatility benchmarks) would be needed to fully isolate the proprietary-signal contribution from known factor premia.

Point-in-time validation and controls

This is not presented as a live trading record or a pre-registered fund strategy. It is a **point-in-time historical simulation** showing that ORTEX stock scores, used systematically inside a simple long-only S&P 500 selection framework, have historically identified portfolios with materially better absolute return and benchmark-relative compounding than the S&P 500 Total Return Index, with comparable risk-adjusted metrics and strong drawdown recovery. Each rebalance used only information available on or before the rebalance date. Figures are gross of transaction costs unless explicitly noted.

- **Long evaluation window, limited reliance on fitted parameters.** ML-derived sub-signals (momentum-ML, quality-ML, value-ML) account for a minority of the composite weight; the rest is rule-based across fundamentals, technicals and ORTEX short-interest data, none of which were tuned against the 2010–2026 window. That makes the 16.3-year evaluation period long relative to the parameter set being tested, but does not by itself constitute proof that the strategies were specified before the period began.
- **No look-ahead at any rebalance.** Each monthly rebalance uses only stock-score data that was published to the platform on or before the rebalance day. Fundamentals are lagged to publication date, not fiscal-period date.
- **Survivorship-bias-free universe.** S&P 500 universe membership is reconstituted each month using historical constituency, so removed names still appear in the universe in the periods when they were members.
- **Selection-bias caveat.** These are two illustrative configurations from the ORTEX Backtester — readers should treat them as historical simulations, not as live, pre-registered track records. A full robustness review should compare them with alternative parameterisations and standard factor benchmarks.

What about transaction costs?

The headline figures are gross. For a top-25/top-20 monthly-rebalanced strategy in S&P 500 names, friction is small but not zero. Below is the approximate CAGR drag at three illustrative monthly turnover bands and four round-trip cost assumptions. Realised holdings-level turnover was not measured for this brief, so the turnover bands are illustrative rather than measured.

Assumption	5 bps	10 bps	25 bps	50 bps
Balanced — net CAGR (gross 18.7%)				
20% monthly turnover	18.56%	18.42%	18.00%	17.31%
40% monthly turnover	18.42%	18.14%	17.31%	15.93%
60% monthly turnover	18.28%	17.86%	16.61%	14.56%
Short Momentum — net CAGR (gross 21.7%)				
20% monthly turnover	21.56%	21.41%	20.99%	20.28%
40% monthly turnover	21.41%	21.13%	20.28%	18.87%
60% monthly turnover	21.27%	20.84%	19.57%	17.47%

Even under aggressive 60% monthly turnover and 50 bps round-trip cost assumptions, Short Momentum remains above the S&P 500 Total Return Index's 14.1% CAGR (17.10%), while Balanced is broadly in line with the benchmark (14.34%). Realised holdings-level turnover was not measured for this brief; assumed bands are illustrative.

Why we're publishing this

We're not selling these specific strategies as products. We're showing what becomes possible when you have ORTEX-quality short-interest, fundamental and sentiment data at your fingertips, blended into a single signal that updates every day.

Inside ORTEX, every subscriber sees the same stock scores and runs the same backtester that produced these results — on any universe, any factor weights, any rebalance frequency they like. The two strategies in this brief are illustrative configurations, not the only way to use the engine.

Build your own version — beat the market, your way

Don't just take our weights — build your own. ORTEX subscribers can pull every stock score (current and full history) directly from the API, blend factors with whatever weighting you believe in, and run the backtester to see if your version can beat ours.

API reference: docs.ortex.com/reference/stock_stock_scores_list · pull current and historical composite stock scores for any ticker, drop them into your own model, and out-perform the index on your own terms.

TECHNICAL BRIEF

Download the full 18-page PDF

All charts, full methodology, backtest controls, cost sensitivity and disclosures (~1.3 MB).

See live ORTEX Stock Scores. Build your own strategies.

Browse current scores, run your own backtests, and see the same data behind these results — including ORTEX-proprietary short-interest signals you won't find anywhere else.

Open ORTEX →

Important disclosures. The performance figures above are the result of a historical backtest run on the ORTEX Backtester from 2010-01-04 to 2026-05-06 (16.33 years, 4,107 trading days; the 2026 calendar year is YTD). They are not an actual trading record, do not include taxes, brokerage fees or borrowing costs, and are gross of any management fee unless explicitly noted in the cost-sensitivity table. Strategy NAV is computed from split-adjusted daily close prices with cash dividends credited on ex-date and reinvested at the next rebalance — dividends are not double-counted in the price series. Each rebalance uses only data that was available on or before the rebalance date (no look-ahead). S&P 500 universe membership is reconstituted historically using point-in-time constituents. The cap-weighted benchmark is the **S&P 500 Total Return Index** (dividend-reinvested, daily and monthly); the equal-weighted benchmark is the Invesco S&P 500 Equal Weight ETF (RSP, dividend-reinvested monthly closes). The two strategies presented are illustrative configurations of the ORTEX scoring engine and should be treated as historical simulations, not as live, pre-registered track records. Past performance is not indicative of future results. Equity strategies of this type can experience drawdowns of 30%+ and did so during the COVID-19 crash of March 2020. This article is informational only and is not investment, tax, legal or financial advice.