Is High Yield Just Expensive Equity? A High-Yield ETF Against an Equity + Treasury Replica, 2007–2026

Gaurav Gupta · Research note · 29 October 2026 · JNK vs SPY and a constant-maturity 5-year Treasury; monthly, Dec 2007 – Sep 2026; walk-forward replica from Dec 2010

0.55 + 0.26
JNK equity beta (SPY) + Treasury beta (5y); R^2 0.57

0.73 vs 0.46
Equity beta in falling vs rising months

7.7% vs 4.7%
Replica vs JNK a year, net of costs; gap t = −2.5

−1.3%
JNK with its betas hedged out, a year (T-bills 1.6%)

Dec 2010 – Sep 2026	Return a year	Volatility	Worst drawdown	Sharpe	Years ahead
High-yield ETF (JNK)	4.7%	7.7%	−16.2%	0.40	5 of 16
Equity + Treasury replica	7.7%	7.0%	−13.0%	0.88	11 of 16
JNK hedged (fund − betas)	−1.3%	4.7%			

Replica = cash + β_eq·(SPY − cash) + β_tsy·(5y Treasury − cash), betas from the prior 36 months only, 5 bp per unit of weight change; average weights 0.46 / 0.42, no leverage. Sub-periods (JNK / replica): 2011–15 3.4% / 7.6%; 2016–20 7.4% / 8.4%; 2021–26 3.2% / 6.4%.



$1 in JNK grew to $2.07; in the walk-forward replica, to $3.25.

SOURCES

- JNK, SPY daily prices and dividends: Yahoo via defeatbeta/yahoo-finance-data (ODC-BY); US Treasury daily par yield curve (same dataset); sha256-pinned
- Asvanunt & Richardson (2017) JFI 26(3); Merton (1974) JF 29(2); Fama & French (1993) JFE 33(1); Collin-Dufresne, Goldstein & Martin (2001) JF 56(6); Newey & West (1987)

METHOD

- Monthly excess returns over 3-month bills; 5y Treasury = constant-maturity par bond from the daily curve (carry − duration·Δy + convexity)
- Full-sample regression with Newey–West errors (6 lags); up/down beta split on SPY's sign
- Walk-forward replica and hedged fund; gap tested with a Newey–West t-statistic

KEY CALCULATIONS

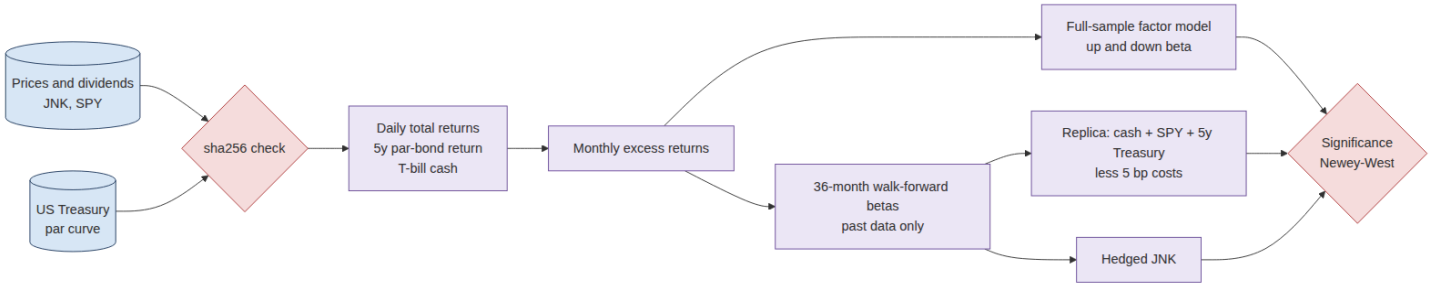
- Stress episodes, JNK / SPY / 5y Treasury: 2008 −25% / −37% / +12%; Covid −12% / −19% / +5%; energy bust −11% / −7% / +2%
- Gap 3.0 pts a year × $1bn ≈ $30M a year (illustrative)
- Hedged residual below cash in all three sub-periods

RECOMMENDATIONS

- Count high yield in the equity risk budget; stress it with the down-market beta (~0.7)
- Keep holdings only where the return after betas and fees is positive over a cycle
- Audit the whole credit line-up the same way; unsmooth private credit marks

Independent research on public data; not investment advice; not deployed. Produced with AI assistance and reviewed by the author. Code: github.com/guptagaurav-info/high-yield-equity-beta · guptagaurav.info/articles/is-high-yield-just-expensive-equity

Pipeline


Prices and dividends
JNK, SPY
US Treasury
par curve
sha256 check
Daily total returns
5y par-bond return
T-bill cash
Monthly excess returns
Full-sample factor model
up and down beta
36-month walk-forward
betas
past data only
Replica: cash + SPY + 5y
Treasury
less 5 bp costs
Hedged JNK
Significance
Newey-West

How a committee would use the audit

