Half the Drawdown / Twice the Sharpe Ratio

Applying the KP Equity Trend Model to the

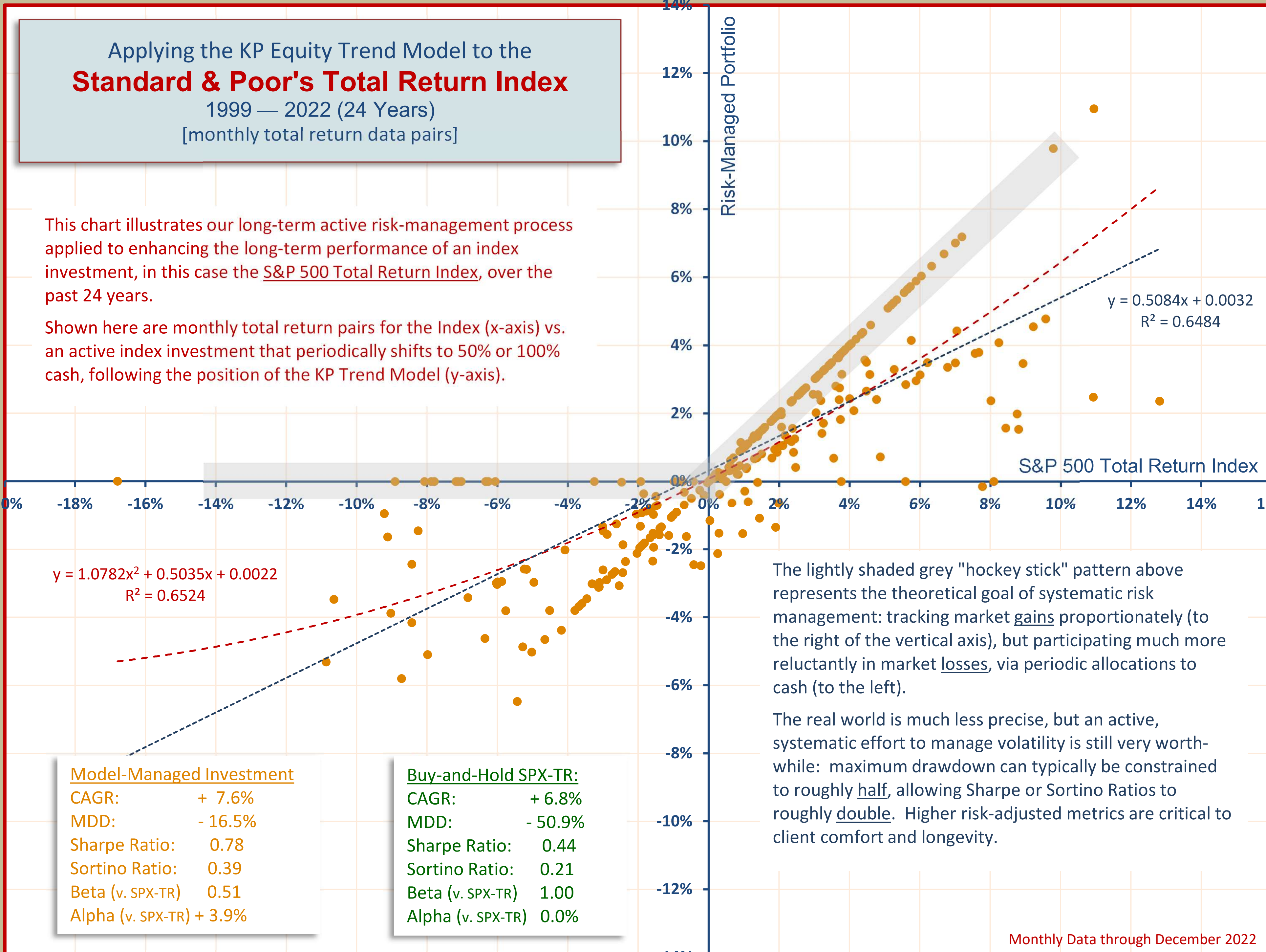
Standard & Poor's Total Return Index

1999 — 2022 (24 Years)

[monthly total return data pairs]

This chart illustrates our long-term active risk-management process applied to enhancing the long-term performance of an index investment, in this case the S&P 500 Total Return Index, over the past 24 years.

Shown here are monthly total return pairs for the Index (x-axis) vs. an active index investment that periodically shifts to 50% or 100% cash, following the position of the KP Trend Model (y-axis).



The lightly shaded grey "hockey stick" pattern above represents the theoretical goal of systematic risk management: tracking market gains proportionately (to the right of the vertical axis), but participating much more reluctantly in market losses, via periodic allocations to cash (to the left).

The real world is much less precise, but an active, systematic effort to manage volatility is still very worth-while: maximum drawdown can typically be constrained to roughly half, allowing Sharpe or Sortino Ratios to roughly double. Higher risk-adjusted metrics are critical to client comfort and longevity.

Model-Managed Investment	
CAGR:	+ 7.6%
MDD:	- 16.5%
Sharpe Ratio:	0.78
Sortino Ratio:	0.39
Beta (v. SPX-TR)	0.51
Alpha (v. SPX-TR)	+ 3.9%

Buy-and-Hold SPX-TR:	
CAGR:	+ 6.8%
MDD:	- 50.9%
Sharpe Ratio:	0.44
Sortino Ratio:	0.21
Beta (v. SPX-TR)	1.00
Alpha (v. SPX-TR)	0.0%

Monthly Data through December 2022