



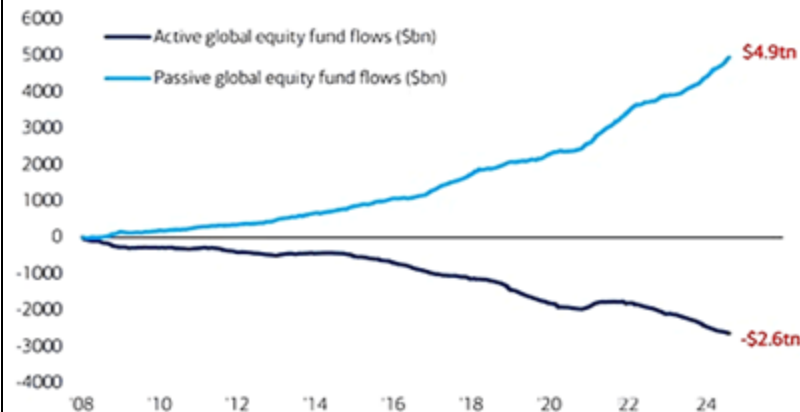
Harnessing The Power Of Market Structure Using NDX Options

A Fundamental Shift From Active To Passive

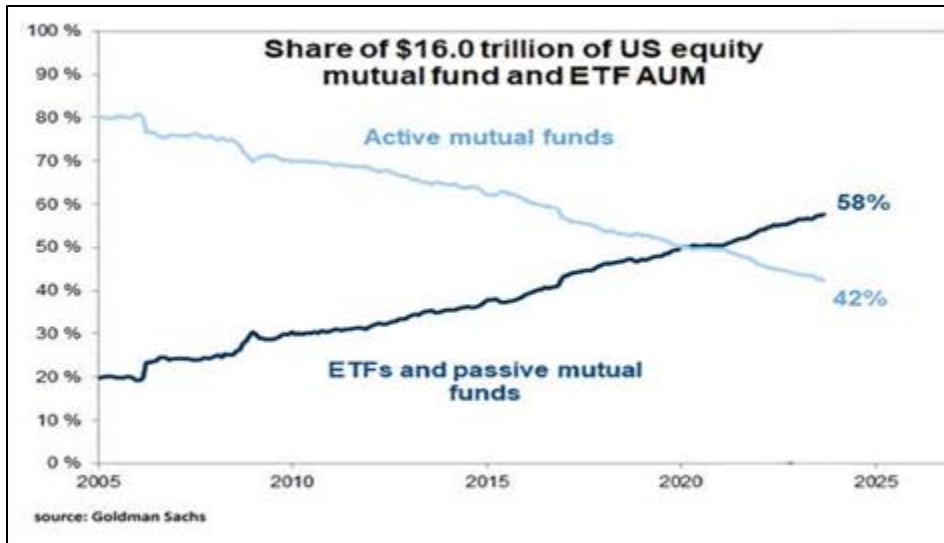
"I view the markets as fundamentally broken. Value is not a consideration for most of the investment money that's out there"

-David Einhorn, Greenlight Capital

Chart 6: \$5tn inflow to passive, >\$2tn outflow from active since '08
Cumulative fund flows to active vs passive global equity funds (\$bn)

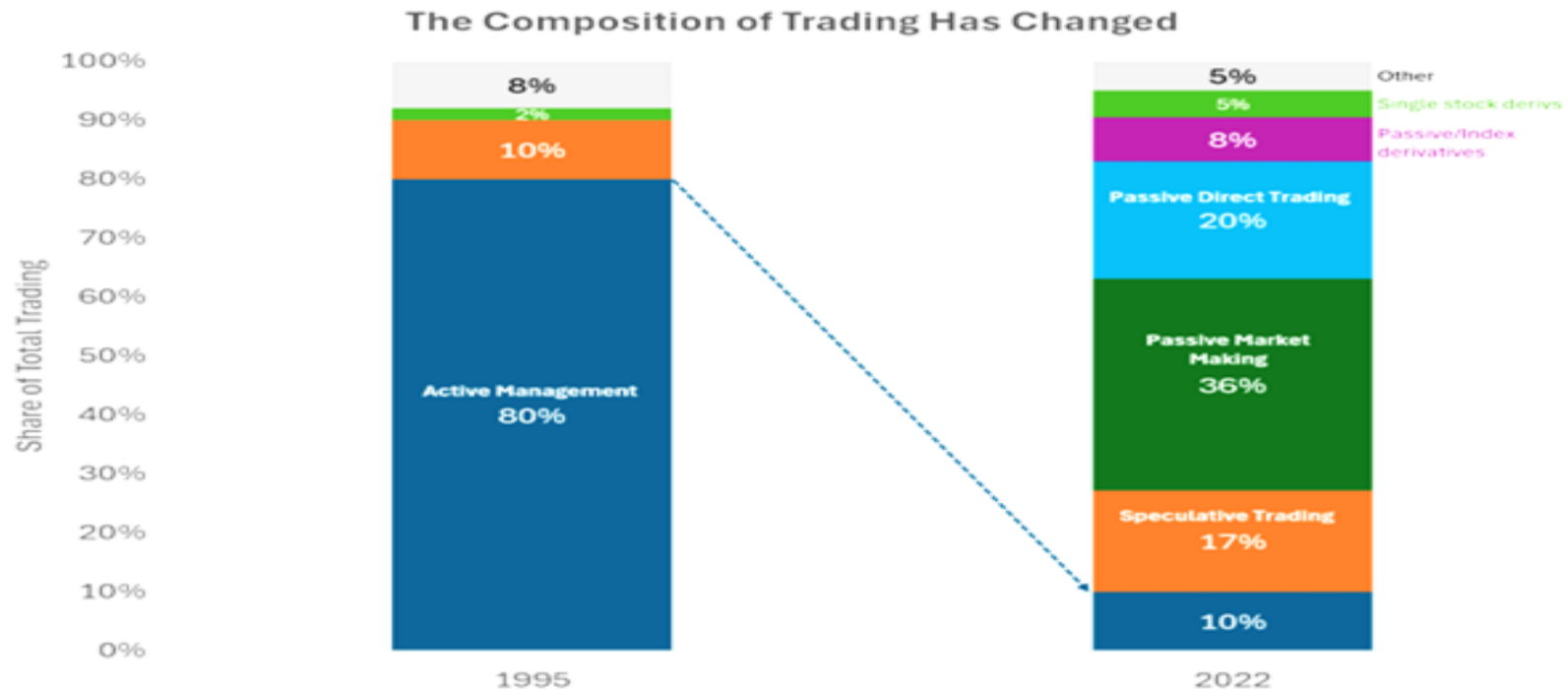


Source: BofA Global Investment Strategy, EPFR



source: Goldman Sachs

Composition of Trading has Changed

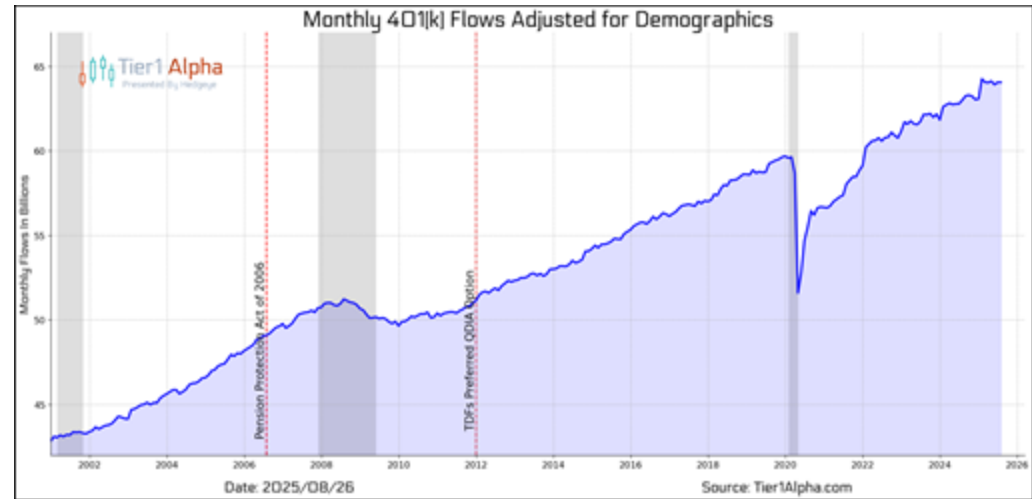


Source: Market Structure Edge, CBOE, Hagstrom 2013, Simplify calculations

Harnessing Market Structure: 401(k) Flows and Target Date Funds

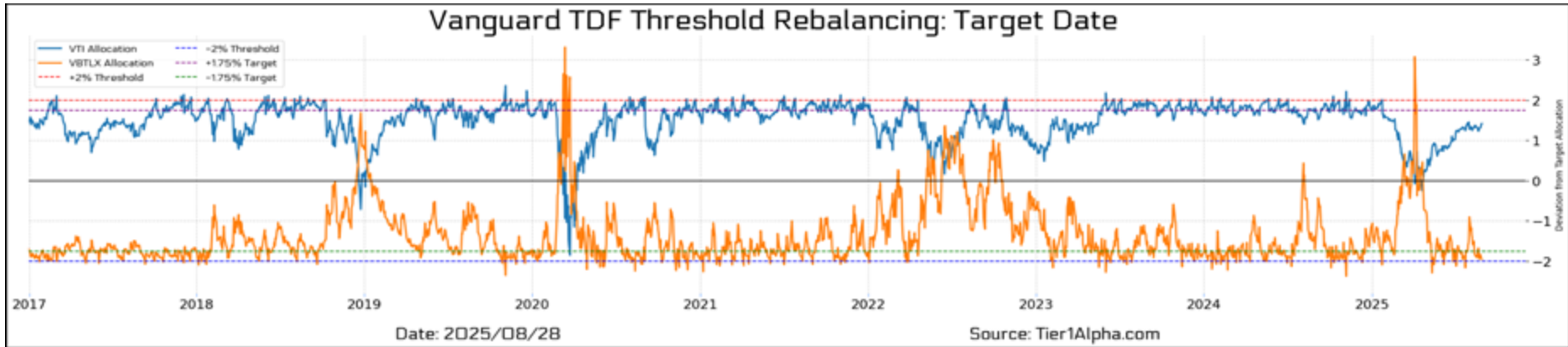
Have you ever wondered who's crazy enough to buy stocks at extreme valuations amid the backdrop of a global trade war?

- 75% of defined contribution plans are funneled into Target Date Funds every month.
- A Target Date Fund (TDF) is an investment vehicle that automatically adjusts its asset allocation based on a specific future date, such as retirement, aiming to become more conservative over time.
- Since TDFs use a "Glide Path" to decide asset allocation, we can estimate how much 401(k) flows are funneled towards equities every month.
- TDFs and 401(k) flows directly connect employment levels with the equity and bond markets.



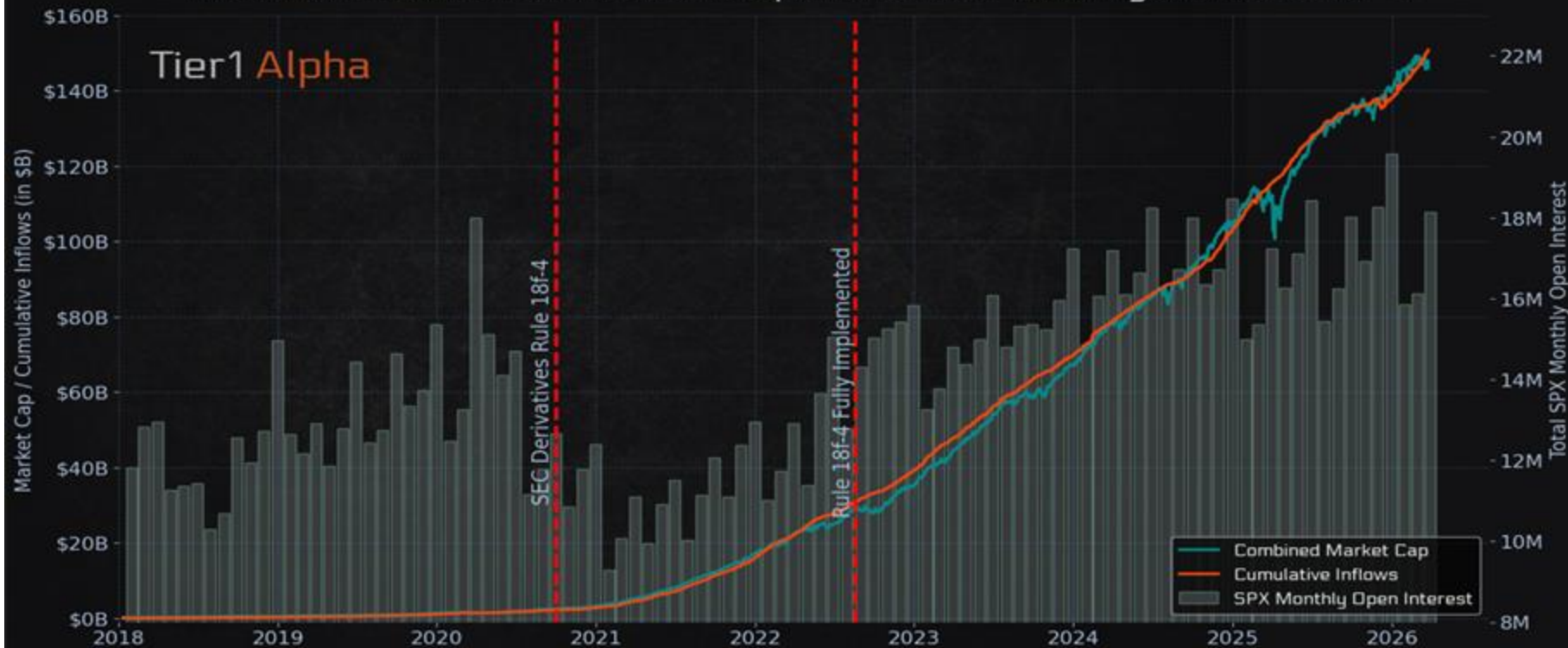
Well, if you're one of the 70 million Americans with a 401(k) plan, *YOU ARE!*

Vanguard TDF Rebalance Shock: April 2025



Growth of Derivative ETFs

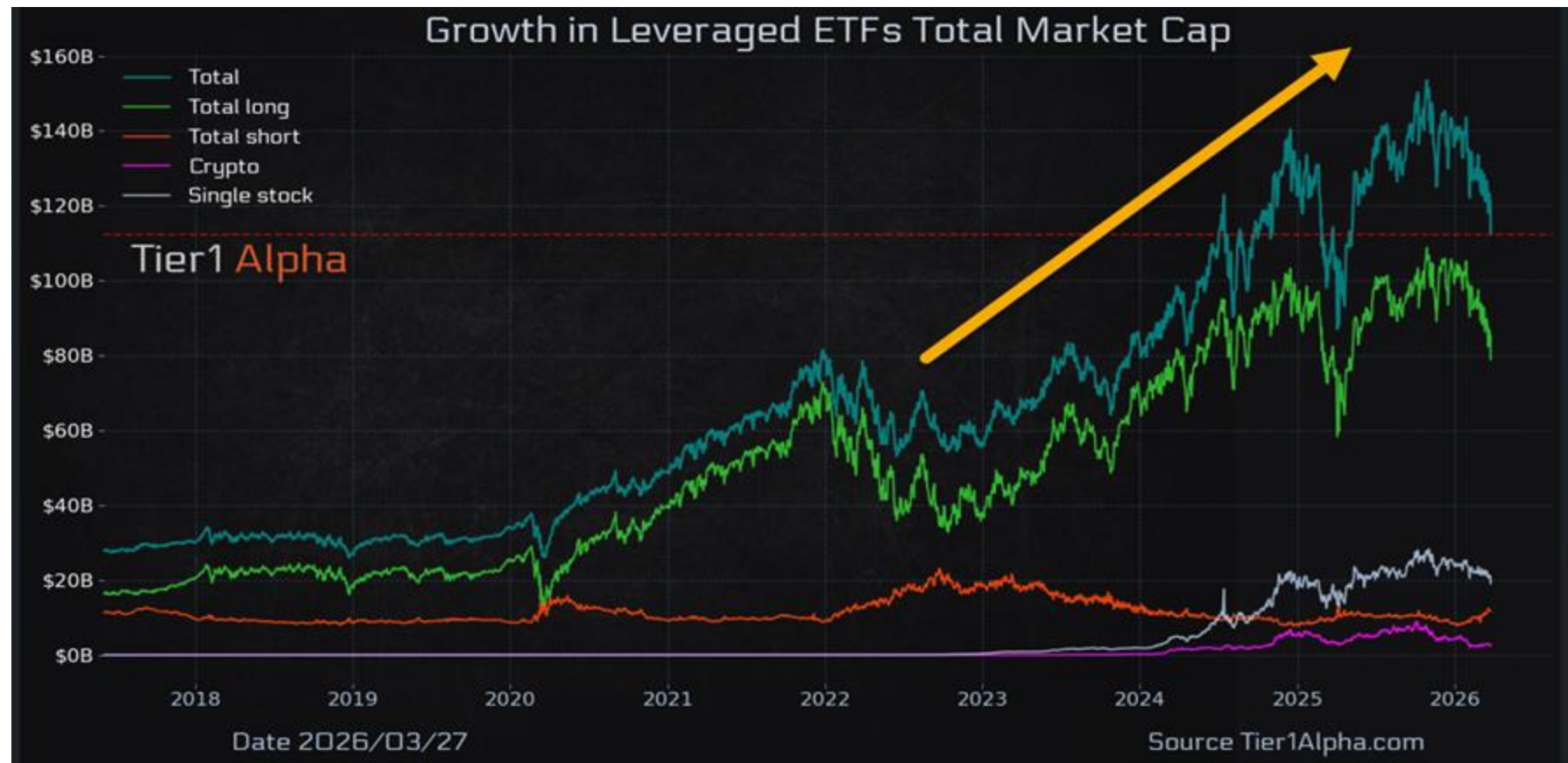
Derivative Income ETFs and SPX Open Interest Following SEC Rule 18f-4



Date: 2026/03/27

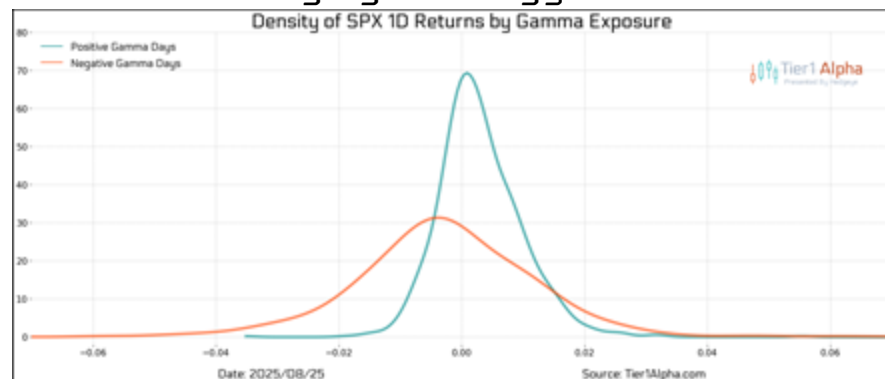
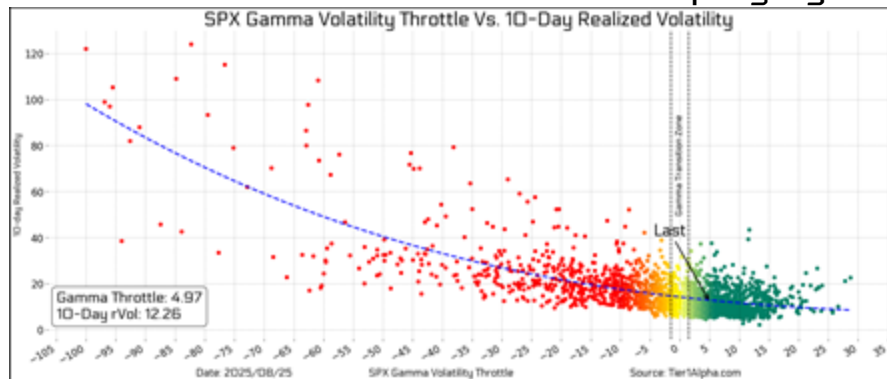
Source: Tier1Alpha.com

Growth of Leveraged ETFs



Harnessing Market Structure: Dealer Activity

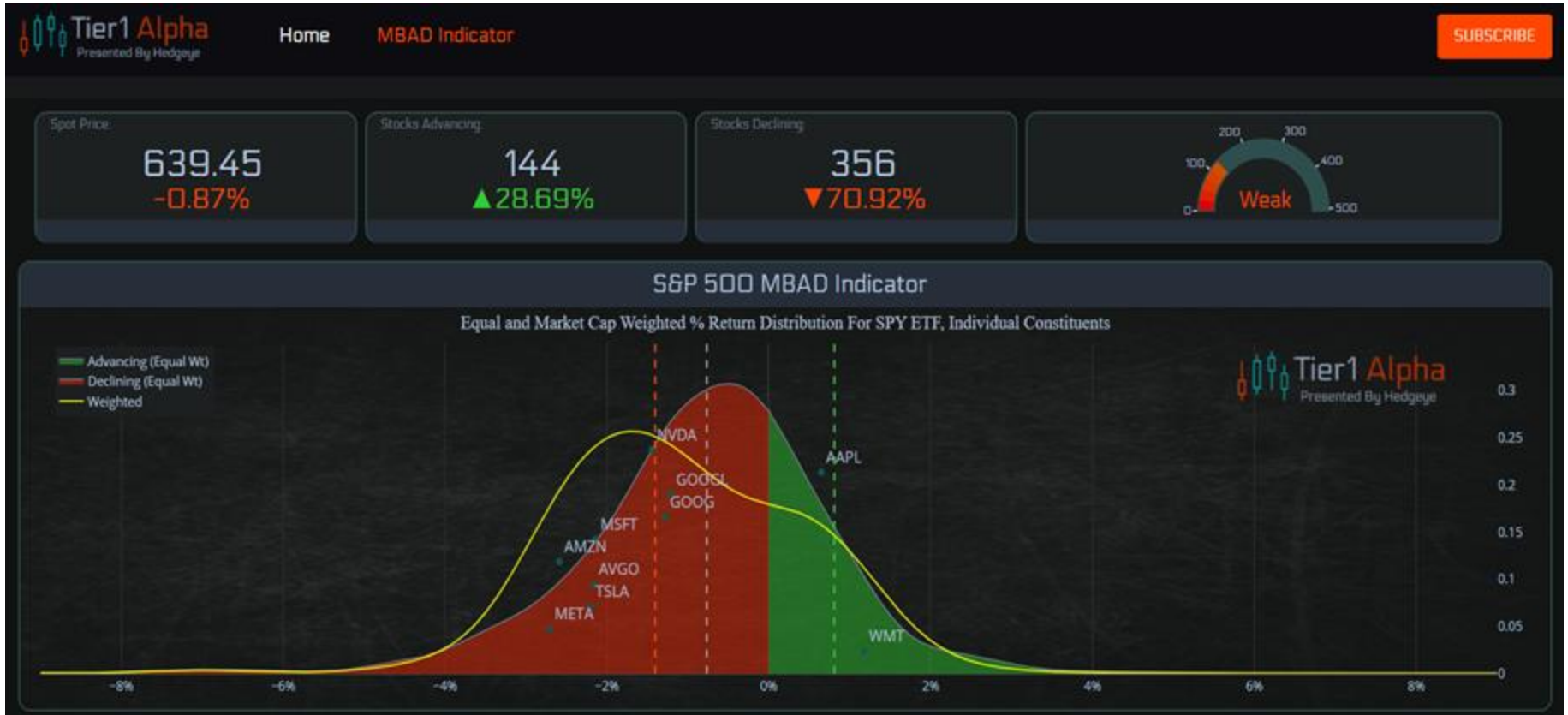
Our Gamma Exposure models aim to track the estimated amount of flows generated by Market Makers deploying a Delta-Neutral Hedging Strategy.



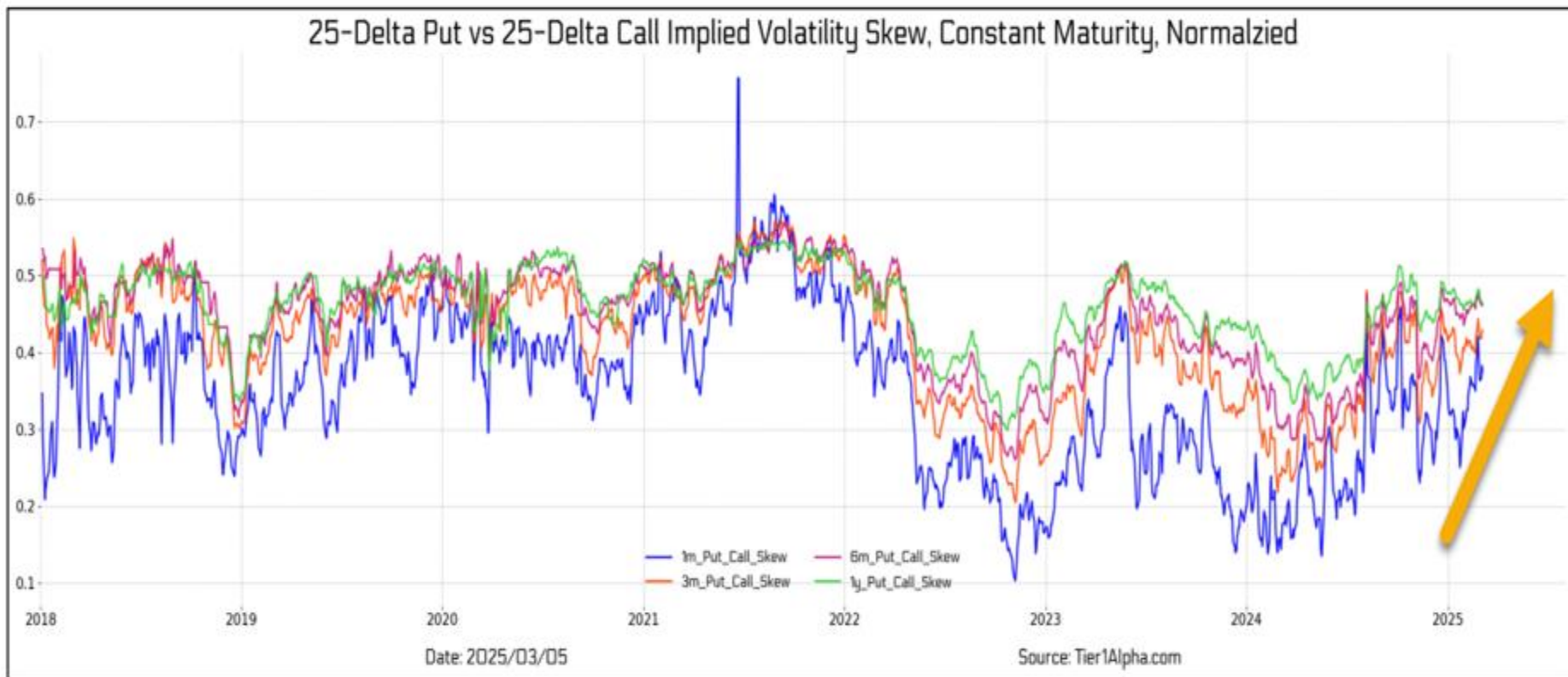
- When Options Dealers are **Positive Gamma**, markets tend to be **LESS volatile**, as dealers are forced to Buy the underlying asset when the market goes down and Sell the underlying asset when the market rises in order to maintain a delta-neutral position.
- This **SUPPRESSES volatility** as the flows are driven in the **OPPOSITE** direction of the cash index.

- When Options Dealers are **Negative Gamma**, markets tend to be **MORE volatile**, as dealers are forced to Sell the underlying asset as the market falls and Buy the underlying asset when the market rises in order to maintain a delta-neutral position.
- This **INCREASES volatility** as the flows are driven in the **SAME** direction of the cash index.

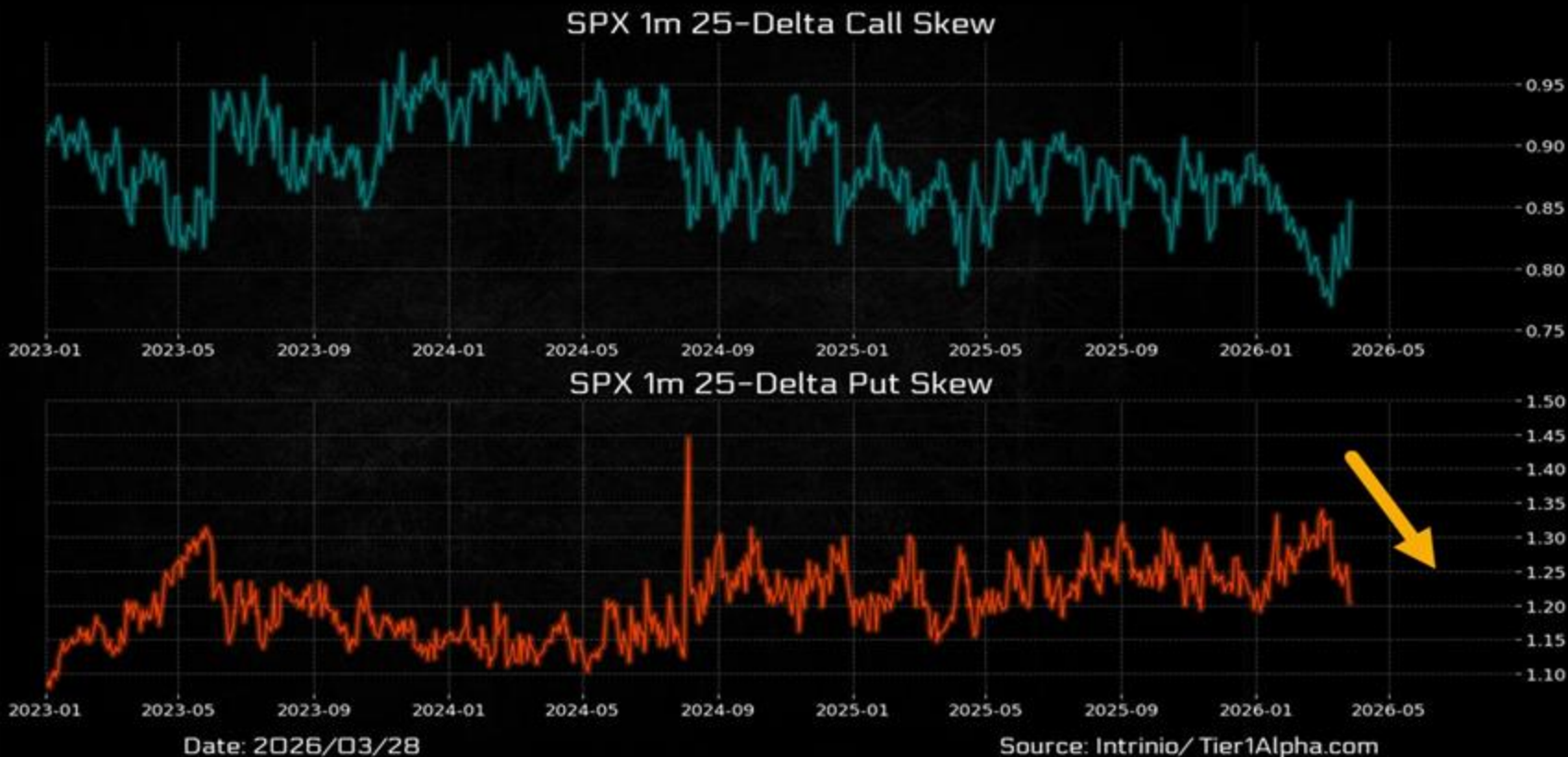
Dispersion an Embedded Characteristic of Mechanical Markets



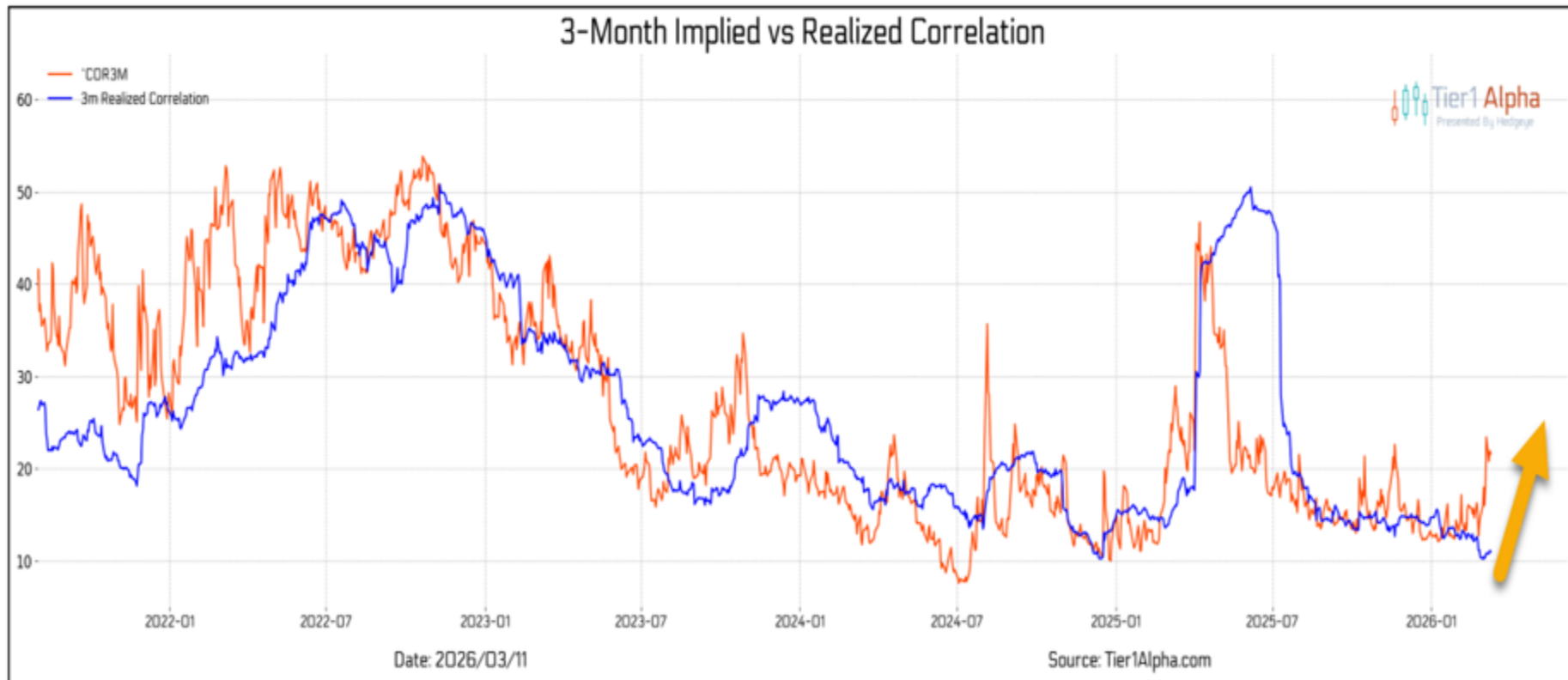
Volatility as a Transparency Tool (Skew March 5th 2026)



Volatility as a Transparency Tool (Skew March 30th 2026)



Volatility as a Transparency Tool – Implied Correlations



Harnessing Market Structure: The Power Behind Our Regime Model

Our regime model identifies three investable environments: Risk Off with high volatility and negative returns, Risk On with low volatility and positive trends, and Opportunistic with high volatility but asymmetric opportunities.

