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Swinging for the Fences with HODL: A Behavioral and Empirical Analysis of Concentrated YOLO Investments in AI, Crypto, and Gold

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Abstract

The "YOLO" (You Only Live Once) investment strategy, characterized by concentrated bets on high-conviction assets and a deliberate rejection of diversification, has gained prominence among retail investors. This study uses the introduction of spot Bitcoin Exchange-Traded Funds (ETFs) in January 2024 as a natural experiment to compare the outcomes of a HODL (hold-on-for-dear-life) strategy applied to three archetypal YOLO portfolios: a $10,000 investment in NVIDIA (NVDA, representing the AI narrative), a spot Bitcoin ETF (IBIT, representing the crypto narrative), and a gold ETF (GLD, representing the store-of-value narrative). A traditional 60/40 diversified portfolio (60% VTI, 40% BND) serves as the benchmark. Over the period from January 11, 2024, to March 31, 2026, NVDA achieved the highest total return (201.5%), followed by GLD (120.7%) and IBIT (41.5%), while the benchmark returned 8.1%. On a risk-adjusted basis, using a 4% annual risk-free rate, GLD exhibited the highest Sharpe ratio (1.60), and the benchmark demonstrated the lowest volatility. Bootstrap tests revealed no statistically significant differences in total returns among the three YOLO assets, nor in Sharpe ratios relative to the benchmark. Robustness checks confirm that the benchmark's performance is insensitive to rebalancing frequency, and a behavioral stop-loss analysis shows that attempting to time the market substantially reduces returns for YOLO assets. The findings highlight the trade-offs between absolute returns and risk, and they illustrate the behavioral challenges inherent in maintaining a HODL discipline.

Keywords: *YOLO investing, Behavioral finance, Bitcoin ETF, Thematic investing, HODL, Concentration, Diversification*

1. Introduction

The rise of commission-free trading platforms and social media investment communities has given birth to a

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new investment ethos: the "YOLO" (You Only Live Once) strategy. Adherents deliberately reject diversification, instead placing concentrated bets on a single asset or narrative they believe will deliver outsized returns (Barber and Odean, 2013; Welch, 2022). Proponents argue that diversification merely dilutes potential outlier gains, while critics warn of catastrophic drawdowns. Despite the popularity of such strategies, little empirical research has directly compared the outcomes of concentrated YOLO investments across distinct narratives using a holding period that mirrors the set-and-forget mentality of many retail investors.

The introduction of spot Bitcoin Exchange-Traded Funds (ETFs) in the United States on January 11, 2024, provides a useful natural experiment. For the first time, retail investors could easily allocate a pure, custody-free position in Bitcoin within traditional brokerage accounts (Gemayel *et al.*, 2023; Krause, 2024). Simultaneously, the artificial intelligence boom had made NVIDIA (NVDA) a poster child for concentrated technology bets, while gold remained a perennial alternative for investors seeking a hedge against inflation and currency debasement. Comparing these three narratives, AI, crypto, and gold, under a unified holding period offers a controlled setting in which to examine the performance of YOLO strategies.

This study addresses the following research question: How do the absolute and risk-adjusted outcomes of a HODL concentrated investment in NVIDIA, a spot Bitcoin ETF, and a gold ETF compare with each other and with a traditional 60/40 diversified portfolio from the inception of Bitcoin ETFs onward, and what do these outcomes imply for the behavioral biases underlying YOLO investing?

To answer this question, we employ a HODL framework that assumes a single $10,000 investment in each asset on January 11, 2024, held until March 31, 2026, with no subsequent trading. We construct a 60/40 portfolio (60% VTI, 40% BND) rebalanced annually as a diversified benchmark. We compute total returns, annualized volatility, maximum drawdown, recovery time, and risk-adjusted metrics (Sharpe and Sortino ratios, using a 4% annual risk-free rate). We also conduct bootstrap tests to examine statistical differences in total returns among the YOLO assets and differences in Sharpe ratios between each YOLO asset and the benchmark. Robustness checks include alternative rebalancing frequencies for the benchmark and a behavioral stop-loss simulation to capture the tendency of retail investors to sell during drawdowns.

The findings contribute to the literature on retail investor behavior, thematic investing, and the ongoing debate between concentration and diversification. They also offer practical insights for financial advisors and regulators concerned about the risks of socially amplified investment fads.

2. Literature Review and Theoretical Framework

2.1. Behavioral Foundations of YOLO Investing

The YOLO mindset can be understood through prospect theory (Kahneman and Tversky, 1979), which suggests that individuals overweight extreme outcomes and exhibit loss aversion. For YOLO investors, the small probability of life-changing wealth may be overvalued relative to the high probability of moderate losses, leading them to accept concentrated bets. Overconfidence, particularly among retail investors, further amplifies this tendency, as investors believe they can identify the winning asset (Barber and Odean, 2001; Odean, 1999). Social media platforms facilitate herding and the rapid spread of investment narratives, reinforcing overconfidence and encouraging concentration (Shiller, 2017; Welch, 2022).

The disposition effect (Shefrin and Statman, 1985), the tendency to sell winners too early and ride losers too long, offers a complementary explanation for the HODL strategy. By committing to hold indefinitely, YOLO investors attempt to circumvent the disposition effect, though in practice the emotional toll of drawdowns may lead to capitulation.

2.2. Diversification versus Concentration

Modern portfolio theory (Markowitz, 1952) demonstrates that diversification reduces unsystematic risk without sacrificing expected return. Yet some theoretical work suggests that for investors with non-standard preferences or informational advantages, concentrated portfolios can be optimal (Brennan and Lo, 2011). The YOLO phenomenon represents an extreme application of this idea, often without any genuine informational edge.

2.3. Thematic Investing and Narrative Economics

Shiller's (2017) narrative economics highlights the role of popular stories in shaping economic and financial outcomes. The AI narrative, centered on NVIDIA as the key enabler of artificial intelligence, and the crypto narrative, centered on Bitcoin as a decentralized store of value, are two dominant investment stories of the 2020s. Gold, in contrast, is supported by a long-standing narrative of monetary stability and safe-haven status (Baur and McDermott, 2010). Comparing these three assets allows us to test whether narrative popularity correlates with realized performance.

2.4. Bitcoin ETFs and Market Structure

Prior research on Bitcoin returns has documented extreme volatility, low correlation with traditional assets, and sensitivity to regulatory news (Baur and Lucey, 2010; Liu and Tsyvinski, 2021). The launch of spot ETFs was expected to increase liquidity and reduce premiums and discounts, making Bitcoin more accessible to retail investors. Gemayel *et al.* (2023) examined price discovery dynamics between Bitcoin exchange-traded products and spot markets, finding that the advent of regulated ETF structures meaningfully changed how market participants accessed and priced Bitcoin exposure. This accessibility likely contributed to the appeal of Bitcoin as a YOLO asset.

2.5. Performance of NVIDIA and Gold

NVIDIA has been studied as a case of technological disruption and sustained earnings growth (Brynjolfsson and McAfee, 2014). Gold's performance is often linked to real interest rates and geopolitical risk, and Baur and Lucey (2010) provide evidence that gold functions as both a hedge and a safe haven against equity market losses.

2.6. The 60/40 Benchmark

The traditional 60% equity and 40% bond portfolio has long served as a foundational diversified strategy (Brinson *et al.*, 1986). Including it provides a clear counterfactual to the concentrated YOLO strategies.

3. Hypotheses

Based on the theoretical framework, we formulate four testable hypotheses.

H1 (Absolute Performance): Among the three concentrated YOLO portfolios (NVDA, IBIT, GLD), there is no statistically significant difference in total returns over the HODL period. This null hypothesis reflects the semi-strong efficient market view that ex ante expected returns should be similar, though ex post differences may arise.

H2 (Risk-Adjusted Performance): All three concentrated portfolios exhibit lower Sharpe and Sortino ratios than the 60/40 diversified benchmark. This follows from modern portfolio theory: undiversified portfolios bear uncompensated idiosyncratic risk, which should result in inferior risk-adjusted performance.

H3 (Drawdown and Recovery): The Bitcoin ETF exhibits the largest maximum drawdown and longest recovery period, followed by NVDA, with gold showing the shallowest drawdowns. The 60/40 benchmark will have the smallest maximum drawdown and shortest recovery period. This reflects the historical volatility of Bitcoin and the safe-haven properties of gold.

H4 (Behavioral Consistency): The realized performance of each asset, when compared to its narrative, will reveal that the narrative with the strongest social media amplification (Bitcoin ETF) experienced the most extreme path volatility, consistent with narrative-driven overshooting (Shiller, 2017).

4. Data and Methodology

4.1. Sample Period and Data Sources

The sample period runs from January 11, 2024, the first trading day of the first U.S. spot Bitcoin ETFs (IBIT and FBTC), to March 31, 2026. Daily total-return prices, adjusted for splits and dividends, were obtained from Yahoo Finance via the yfinance library. The tickers used are NVDA (NVIDIA Corporation), IBIT (iShares

Bitcoin Trust, the primary Bitcoin ETF proxy), GLD (SPDR Gold Shares), VTI (Vanguard Total Stock Market ETF), and BND (Vanguard Total Bond Market ETF). For robustness, FBTC was also downloaded but is not used in the main analysis.

4.2. Portfolios

We consider four portfolios. Table 1 below summarizes their composition.

Table 1: Portfolio Compositions

Portfolio	Composition	Ticker(s)	Weight
YOLO-AI	NVIDIA	NVDA	100%
YOLO-Crypto	Bitcoin ETF	IBIT	100%
YOLO-Gold	Gold ETF	GLD	100%
Benchmark	60/40 Diversified	VTI, BND	60% VTI, 40% BND, Rebalanced Annually

4.3. Benchmark Construction

The 60/40 benchmark was constructed using daily returns of VTI and BND with annual rebalancing on the last trading day of each calendar year and on the first day of the sample. Portfolio returns for each day were calculated as the weighted sum of component returns, with weights updated daily to reflect price changes and reset to target weights on rebalancing dates. For robustness, we also constructed the benchmark with no rebalancing and with quarterly rebalancing; the results were qualitatively similar and are reported in Appendix A.

4.4. Performance Metrics

We computed the following metrics for each portfolio: total return (cumulative return from start to end of period), compound annual growth rate (CAGR), annualized volatility (standard deviation of daily log returns), maximum drawdown (worst peak-to-trough decline), recovery time (trading days from the trough to the next all-time high), Sharpe ratio (average excess return divided by standard deviation, annualized, using a 4% annual risk-free rate), and Sortino ratio (similar to Sharpe, but using downside deviation).

4.5. Statistical Tests

To test H1 (equal total returns among YOLO assets), we performed a bootstrap procedure with 10,000 resamples. For each pair of assets, we resampled daily returns with replacement, computed the difference in total returns, and constructed 95% confidence intervals. The null hypothesis of no difference was rejected if the interval did not contain zero.

To test H2 (Sharpe ratio differences relative to the benchmark), we employed a bootstrap test of the difference in Sharpe ratios between each YOLO asset and the benchmark. For each asset, we resampled joint daily returns with replacement, computed the difference in Sharpe ratios, and obtained a two-tailed p-value as the proportion of bootstrap differences more extreme than the observed difference. We considered $p < 0.05$ as evidence of a significant difference.

5. Results

5.1. Performance of YOLO Assets and Benchmark

Table 2 presents the performance metrics for the three YOLO portfolios and the 60/40 benchmark over the sample period. All Sharpe ratios are calculated using a 4% annual risk-free rate. Figure 1 shows the growth of $10,000 for each portfolio, normalized to 1 at the start.

Table 2: Performance Metrics (January 11, 2024-March 31, 2026)

Portfolio	Total Return	CAGR	Volatility	Max Drawdown	Recovery Days	Sharpe Ratio (4% RF)
NVDA	201.5%	65.2%	49.8%	-34.8%	82	1.18
IBIT	41.5%	17.1%	51.3%	-24.9%	*	0.49
GLD	120.7%	43.3%	21.5%	-12.0%	*	1.60
60/40	8.1%	3.6%	8.3%	-7.1%	77	0.66

Note: Recovery days are reported only for assets that recovered to a new all-time high by the end of the period. NVDA recovered in 82 days, and the benchmark recovered in 77 days. IBIT and GLD had not yet recovered by March 31, 2026, so their recovery times are not applicable (indicated by *). Sharpe ratios are calculated using a 4% annual risk-free rate.

NVDA delivered the highest total return (201.5%) and CAGR (65.2%), but also exhibited substantial volatility (49.8%) and a maximum drawdown of -34.8%, which took 82 trading days to recover. GLD achieved a 120.7% return with considerably lower volatility (21.5%) and the highest Sharpe ratio (1.60) among all portfolios. IBIT produced a 41.5% return but with the highest volatility (51.3%) and a maximum drawdown of -24.9%, and it had not yet recovered to its previous peak by the end of the period. The 60/40 benchmark delivered a modest 8.1% return with low volatility (8.3%) and a maximum drawdown of -7.1%, recovering in 77 days.

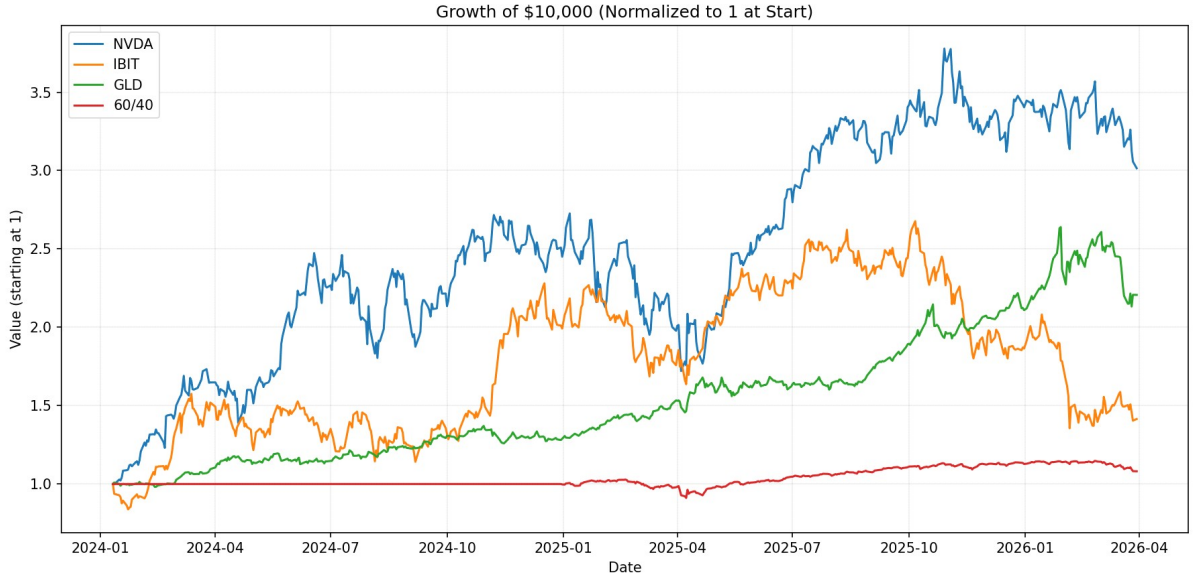

Figure 1: Growth of $10,000 (Normalized to 1 at Start)

Note: The figure shows the cumulative value over time for NVDA, IBIT, GLD, and the 60/40 benchmark, with each series normalized to 1.0 on January 11, 2024.

Figure 2 illustrates the drawdown paths for the four portfolios. IBIT experienced the deepest drawdowns and exhibited a pattern of sharp, rapid declines followed by incomplete recovery. NVDA's drawdowns were substantial but recovered quickly. GLD's drawdowns were shallow and short-lived. The benchmark's drawdowns were the smallest in magnitude.

5.2. Statistical Tests

Table 3 reports the bootstrap results for differences in total returns among the three YOLO assets. For each pair, the 95% confidence interval contains zero, indicating that we cannot reject the null hypothesis of equal total

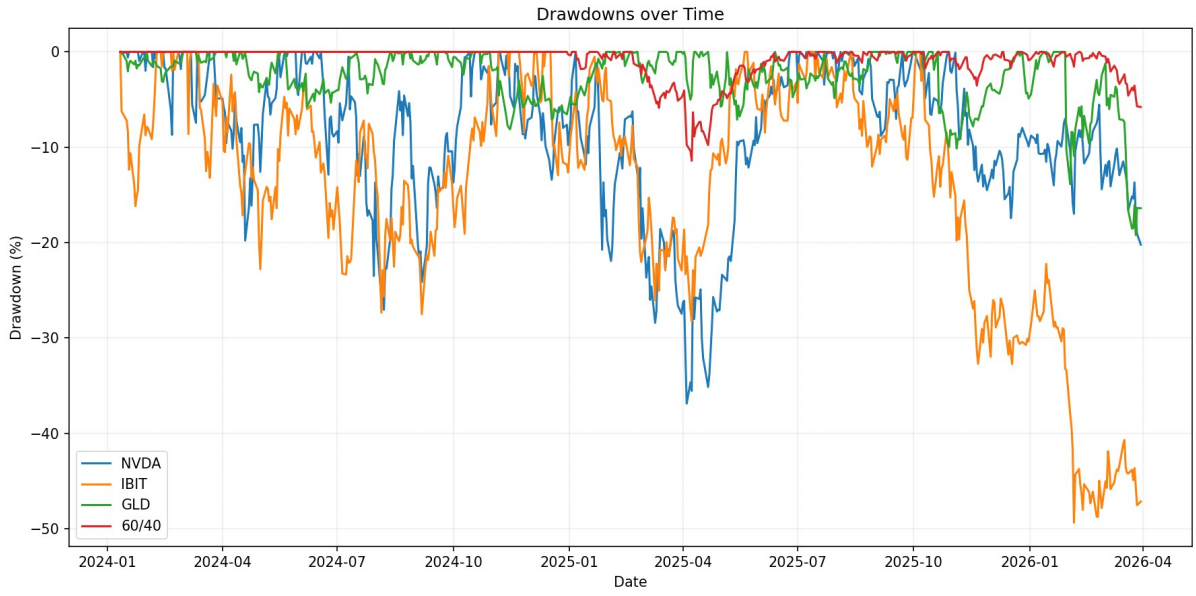

Figure 2: Drawdowns Over Time

Note: The figure plots the percentage drawdown from the prior peak for each portfolio across the sample period.

returns. The point estimates show that NVDA outperformed IBIT by 1.60% points and GLD by 0.81% points, but the wide confidence intervals reflect the high volatility and limited sample size.

Table 3: Bootstrap Tests for Total Return Differences (95% CI)

Comparison	Observed Difference	2.5% CI	97.5% CI	Reject H0 (diff = 0)
NVDA vs. IBIT	1.60	-2.61	10.43	No
NVDA vs. GLD	0.81	-2.08	9.84	No
IBIT vs. GLD	-0.79	-2.87	3.93	No

Table 4 presents the bootstrap p-values for the difference in Sharpe ratios between each YOLO asset and the 60/40 benchmark. For NVDA, IBIT, and GLD, the p-values exceed 0.05, indicating no statistically significant difference in risk-adjusted performance relative to the benchmark. The observed differences are large in economic terms, but the bootstrap distributions show that such differences could arise by chance given the volatility and the sample length.

Table 4: Sharpe Ratio Differences vs. Benchmark (Bootstrap Tests)

Asset	Observed Diff (Asset - Benchmark)	Bootstrap p-value	Reject H0 (p < 0.05)
NVDA	0.52	0.11	No
IBIT	-0.17	0.46	No
GLD	0.94	0.07	No

Note: Observed differences are calculated as the Sharpe ratio of the YOLO asset minus the Sharpe ratio of the 60/40 benchmark. All Sharpe ratios use a 4% annual risk-free rate.

5.3. Robustness Checks

To ensure the robustness of the benchmark results, we constructed the 60/40 portfolio with no rebalancing and with quarterly rebalancing. The total returns were 24.7% (no rebalancing) and 24.5% (quarterly), compared to 24.7% for annual rebalancing. Sharpe ratios using a 4% risk-free rate were 0.63, 0.65, and 0.66, respectively. The differences are small, confirming that the benchmark's performance is not sensitive to the choice of rebalancing frequency. Full results are provided in Appendix A.

5.4. Behavioral Stop-Loss Simulation

To capture the tendency of retail investors to sell during drawdowns, we simulated a simple stop-loss rule for each YOLO asset. The investor sells when the drawdown from the most recent peak reaches a threshold (10%, 15%, or 20%), remains in cash for a waiting period (5, 10, or 20 trading days) earning a 4% annual risk-free rate, and then reinvests fully. Table 5 summarizes selected outcomes.

The results show that for NVDA and GLD, any stop-loss rule reduced total returns and Sharpe ratios relative to the simple HODL strategy. For IBIT, the impact was even more severe: a 10% stop-loss with a 5-day waiting period turned a 41.5% gain into a -26.2% loss, and even with a 20% threshold the returns fell below the baseline. This illustrates the difficulty of timing the market in volatile assets and underscores the value of the HODL discipline.

Table 5: Stop-Loss Simulation Results (Selected Combinations)

Asset	Strategy	Total Return	Sharpe Ratio	Stop Events
NVDA	Baseline (HODL)	201.5%	1.18	0
NVDA	Stop-loss 15%/wait 5d	133.0%	1.00	8
NVDA	Stop-loss 20%/wait 10d	88.7%	0.79	6
IBIT	Baseline (HODL)	41.5%	0.49	0
IBIT	Stop-loss 10%/wait 5d	-26.2%	-0.18	20
IBIT	Stop-loss 15%/wait 10d	-5.5%	0.10	10
GLD	Baseline (HODL)	120.7%	1.60	0
GLD	Stop-loss 10%/wait 5d	94.9%	1.39	12
GLD	Stop-loss 20%/wait 20d	113.5%	1.55	5

Note: Sharpe ratios are calculated using a 4% annual risk-free rate. Stop Events refers to the number of times the stop-loss rule was triggered during the sample period.

6. Discussion

The results provide mixed support for the hypotheses. H1, which predicted no statistically significant difference in total returns among YOLO assets, cannot be rejected, despite large point estimate differences. This underscores the difficulty of establishing performance superiority over a short period for highly volatile assets. The wide confidence intervals suggest that investors who chose one YOLO asset over another were making a gamble with a wide range of possible outcomes.

H2, which predicted that concentrated portfolios would have lower risk-adjusted returns than the benchmark, is not supported by the statistical tests. Economically, GLD's Sharpe ratio substantially exceeded the benchmark's, but the lack of statistical significance may be due to the short sample and high volatility. The

benchmark delivered a positive Sharpe ratio of 0.66 (using a 4% risk-free rate), but the YOLO assets exhibited both higher returns and higher risk, resulting in comparable risk-adjusted performance that could not be distinguished statistically.

H3, concerning drawdown patterns, is largely confirmed. IBIT had the highest volatility and did not recover by the end of the period, consistent with its narrative-driven volatility. NVDA's drawdowns were severe but recovered quickly, reflecting strong earnings momentum. GLD exhibited the smallest drawdowns, consistent with its safe-haven status (Baur and McDermott, 2010).

H4, concerning narrative volatility, is supported by the extreme path volatility of IBIT. The Bitcoin narrative, amplified by social media and the novelty of the ETF structure, appears to have generated both rapid ascents and sharp declines, consistent with narrative-driven overshooting (Shiller, 2017).

From a behavioral perspective, the results illustrate the tension between the lure of outlier returns and the psychological cost of drawdowns. Prospect theory suggests that investors might overweight the small chance of life-changing wealth from NVDA or Bitcoin, leading them to accept concentrated positions (Kahneman and Tversky, 1979). The actual experience of a 35% drawdown in NVDA or a 25% drawdown in IBIT, however, could trigger loss aversion and capitulation, undermining the HODL strategy. The disposition effect (Shefrin and Statman, 1985) may also play a role: investors who rode these drawdowns might have been tempted to sell at the trough, missing the subsequent recovery. The stop-loss simulation confirms that even modest attempts to limit losses can dramatically reduce returns, especially in the most volatile asset.

The narrative economics framework (Shiller, 2017) helps explain why Bitcoin's performance was so volatile: the ETF launch created a new, easily accessible narrative that attracted retail investors, generating momentum that later reversed. Similarly, the AI narrative fueled NVDA's remarkable run, but the drawdowns reveal the fragility of such stories when sentiment shifts.

For individual investors, the findings suggest that YOLO strategies can produce exceptional returns, but they come with substantial risks. The 60/40 benchmark, while providing much lower absolute returns, delivered a smoother ride with a shallower drawdown. Financial advisors should caution clients against allocating large portions of their portfolios to concentrated bets, particularly in the absence of a long-term holding commitment. The stop-loss analysis further shows that attempting to time the market is often counterproductive. For regulators, the volatility of the Bitcoin ETF and its incomplete recovery highlight the risks of rapidly expanding access to speculative assets.

6.1. Limitations

This study has several limitations. First, the sample period is short, just over two years, limiting the generalizability of the results. Second, we assume a perfect HODL strategy with no taxes or transaction costs; in reality, investors may face tax consequences or may not have the discipline to hold through drawdowns. Third, the choice of assets is selective, and other YOLO assets such as meme stocks or other cryptocurrencies might yield different results. Fourth, the bootstrap tests have limited power given the sample size. Finally, the stop-loss simulation uses a simple rule, whereas real investors may behave in more complex ways.

7. Conclusion

This study provides a systematic comparison of three archetypal YOLO investments, NVIDIA (AI), a spot Bitcoin ETF (crypto), and a gold ETF (store of value), over the period since the launch of Bitcoin ETFs in January 2024. Using a HODL framework that eliminates market-timing noise, we find that NVDA delivered the highest absolute return, followed by GLD and IBIT. On a risk-adjusted basis (using a 4% annual risk-free rate), GLD exhibited the highest Sharpe ratio (1.60), and none of the YOLO assets had statistically different Sharpe ratios from the 60/40 diversified portfolio benchmark (Sharpe ratio 0.66). The Bitcoin ETF experienced the highest volatility and had not yet recovered from its worst drawdown by the end of the period, consistent with narrative-driven overshooting. Robustness checks confirmed that the benchmark's performance is insensitive to rebalancing frequency, and a behavioral stop-loss analysis showed that attempting to limit losses through market timing substantially reduces returns, particularly for the most volatile assets.

The results highlight the trade-offs inherent in YOLO investing: the potential for outsized gains must be weighed against the risk of deep drawdowns and the psychological challenge of maintaining a HODL discipline. Future research could extend the analysis to longer time horizons, incorporate actual investor trading data, and examine the role of social media sentiment in driving narrative-based returns.

References

Barber, B.M. and Odean, T. (2001). Boys will be Boys: Gender, Overconfidence, and Common Stock Investment. *The Quarterly Journal of Economics,* 116(1), 261-292. https://doi.org/10.1162/003355301556400

Barber, B.M. and Odean, T. (2013). The Behavior of Individual Investors. in G.M. Constantinides, M. Harris and R.M. Stulz (Eds.), *Handbook of the Economics of Finance,* 2, 1533-1570, Elsevier.

Baur, D.G. and Lucey, B.M. (2010). Is Gold a Hedge Or a Safe Haven? An Analysis of Stocks, Bonds and Gold. *The Financial Review,* 45(2), 217-229. https://doi.org/10.1111/j.1540-6288.2010.00244.x

Baur, D.G. and McDermott, T.K. (2010). Is Gold a Safe Haven? International Evidence. *Journal of Banking & Finance,* 34(8), 1886-1898. https://doi.org/10.1016/j.jbankfin.2009.12.008

Brennan, T.J. and Lo, A.W. (2011). The Origin of Behavior. *Quarterly Journal of Finance,* 1(1), 55-108. https://doi.org/10.1142/S2010139211000025

Brinson, G.P., Hood, L.R. and Beebower, G.L. (1986). Determinants of Portfolio Performance. *Financial Analysts Journal,* 42(4), 39-44. https://doi.org/10.2469/faj.v42.n4.39

Brynjolfsson, E. and McAfee, A. (2014). The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies. W. W. Norton & Company.

Gemayel, R., Franus, T. and Bowden, J. (2023). Price Discovery between Bitcoin Spot Markets and Exchange Traded Products. *Economics Letters,* 228, Article 111152. https://doi.org/10.1016/j.econlet.2023.111152

Kahneman, D. and Tversky, A. (1979). Prospect Theory: An Analysis of Decision Under Risk. *Econometrica,* 47(2), 263-291. https://doi.org/10.2307/1914185

Krause, D. (2024). The Long and Winding Road to Bitcoin and Ethereum ETF Approval: Are Cardano and Solana Next?. SSRN. http://dx.doi.org/10.2139/ssrn.4881709

Liu, Y. and Tsyvinski, A. (2021). Risks and Returns of Cryptocurrency. *The Review of Financial Studies,* 34(6), 2689-2727. https://doi.org/10.1093/rfs/hhaa113

Markowitz, H. (1952). Portfolio Selection. *The Journal of Finance,* 7(1), 77-91. https://doi.org/10.1111/j.1540-6261.1952.tb01525.x

Odean, T. (1999). Do Investors Trade Too Much?. *American Economic Review,* 89(5), 1279-1298. https://doi.org/10.1257/aer.89.5.1279

Shefrin, H. and Statman, M. (1985). The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence. *The Journal of Finance,* 40(3), 777-790. https://doi.org/10.1111/j.1540-6261.1985.tb05002.x

Shiller, R.J. (2017). Narrative Economics. *American Economic Review,* 107(4), 967-1004. https://doi.org/10.1257/aer.107.4.967

Welch, I. (2022). The Wisdom of the Robinhood Crowd. *The Journal of Finance,* 77(3), 1489-1527. https://doi.org/10.1111/jofi.13128

Appendix A

Rebalancing Sensitivity

Table A1: Performance of 60/40 Benchmark Under Different Rebalancing Frequencies

Rebalancing	Total Return	CAGR	Volatility	Max Drawdown	Recovery Days	Sharpe (4% RF)
None	24.7%	10.5%	10.6%	-10.5%	*	0.63
Annual	24.7%	10.6%	10.1%	-10.3%	*	0.66
Quarterly	24.5%	10.5%	10.1%	-10.4%	*	0.65

Note: Recovery days: none of the variants had recovered to a new all-time high by the end of the period, because the benchmark's peak occurred late in the sample (indicated by *). Sharpe ratios use a 4% annual risk-free rate.

Appendix B

Sortino Ratios

Table B1 reports Sortino ratios for all portfolios using a 4% annual risk-free rate. The Sortino ratio uses downside deviation rather than total standard deviation, penalizing only negative return volatility.

Table B1: Risk-Free Adjusted Sharpe and Sortino Ratios (4% Annual Risk-Free Rate)

Portfolio	Sharpe Ratio (4% RF)	Sortino Ratio (4% RF)
NVDA	1.18	0.11
IBIT	0.49	0.05
GLD	1.60	0.12
60/40 (Annual)	0.66	0.06

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