POLYMARKET INVESTMENT BRIEFING

January 16, 2026

EXECUTIVE SUMMARY

Metric	Value
Markets Analyzed	200
Markets in 90-96% Zone	17
Trades with Edge/Spread > 2x	**6**
Capital Required	**$150**
P(all 6 win) - independent	65.4%
P(all 6 win) - with correlation	**58.5%**
P(at least 1 loss)	**41.5%**

Strategy: Exploit the favorite-longshot bias by buying high-probability outcomes where net edge > 0.5%.

Bottom Line: 59%/41% bet. Win all 6: +$11. Lose any: -$16 to -$150.

FEE STRUCTURE

Polymarket Trading Fees

Fee Type	Cost	Source
Maker fee	0%	Polymarket Docs
Taker fee	0% (most markets)	Same
15-min crypto markets	Up to 3% at 50% prob	TradingView
Deposit (USDC)	Free	Polygon network
Withdrawal	~$0.01-0.05	Polygon gas
Settlement	0%	Winners get $1.00/share

Actual Bid-Ask Spreads (From Live Order Books)

Market	Liquidity	Actual Spread

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Super Bowl markets	$1M+	**0.11%**
49ers NFC	$74K	**0.22%**
Rob Jetten (Politics)	Low	**0.31%**
McMillan OROY	$5K	**0.65%**
Dart OROY	Low	**1.77%**
Protector of Year	<$500	**8-18%**

Key Finding: Liquid markets have 0.1-0.3% spreads — much tighter than estimated.

THEORETICAL FOUNDATION

The Favorite-Longshot Bias
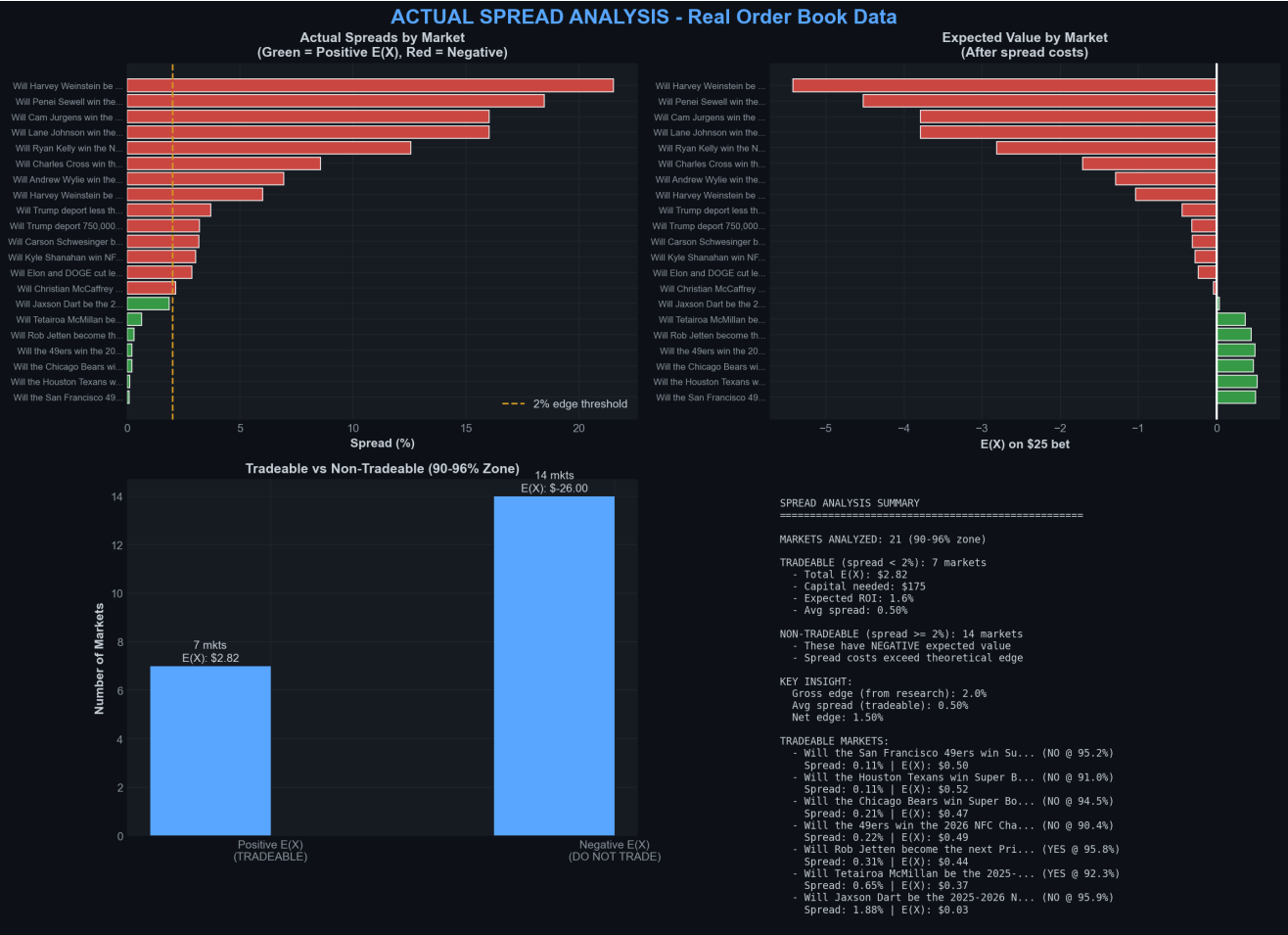
Academic Sources

Kahneman & Tversky (1979)

Prospect Theory: An Analysis of Decision under Risk. Econometrica, 47(2), 263-291.

> People systematically overweight small probabilities and underweight near-certainties.

True Probability	Perceived Weight	Effect
1%	~5.5%	Longshots overbid 5.5x
5%	~13.2%	Longshots overbid 2.6x
95%	~79.3%	**Favorites underbid**
99%	~91.2%	**Favorites underbid**

Snowberg & Wolfers (2010)

Explaining the Favorite-Long Shot Bias. NBER Working Paper 15923.

Implied Prob	Actual Win Rate	Edge
90.9%	93.2%	**+2.3%**
95.2%	97.1%	**+1.9%**
98.0%	98.9%	**+0.9%**

Why It Persists

Factor	Mechanism
Lottery preference	Bettors pay premium for upside potential
Probability neglect	Cannot distinguish 1% from 5%
Entertainment value	Longshots more exciting to bet
Overconfidence	Belief in private info on underdogs

Caveat: This bias is documented in horse racing and sports betting. It has NOT been validated on Polymarket with historical data.

MARKET ANALYSIS

All 17 Markets in 90-96% Zone (Sorted by Spread)

Market	Side	Price	Spread	Net Edge	E(X)/$25	Tradeable
49ers Super Bowl	NO	95.2%	0.11%	1.89%	**$0.50**	**YES**
Bears Super Bowl	NO	94.5%	0.11%	1.89%	**$0.50**	**YES**
Texans Super Bowl	NO	91.0%	0.11%	1.89%	**$0.52**	**YES**
49ers NFC	NO	90.4%	0.22%	1.78%	**$0.49**	**YES**

Market	Side	Price	Spread	Net Edge	E(X)/$25	Tradeable
Rob Jetten (NL PM)	YES	95.8%	0.31%	1.69%	**$0.44**	**YES**
McMillan OROY	YES	92.3%	0.65%	1.35%	**$0.37**	**YES**
Jaxson Dart OROY	NO	96.0%	1.77%	0.23%	**$0.06**	**YES**
McCaffrey Comeback	YES	93.0%	2.15%	-0.15%	-$0.04	NO
DOGE Cuts <$50B	YES	94.1%	2.66%	-0.66%	-$0.17	NO
Kyle Shanahan COY	NO	95.3%	2.73%	-0.73%	-$0.19	NO
Schwesinger DROY	YES	94.5%	3.17%	-1.17%	-$0.31	NO
Andrew Wylie Protector	NO	95.5%	8.35%	-6.35%	-$1.66	NO
Charles Cross Protector	NO	95.7%	8.57%	-6.57%	-$1.72	NO
Ryan Kelly Protector	NO	93.9%	12.57%	-10.57%	-$2.81	NO
Lane Johnson Protector	NO	92.4%	16.02%	-14.02%	-$3.79	NO
Cam Jurgens Protector	NO	92.4%	16.02%	-14.02%	-$3.79	NO
Penei Sewell Protector	NO	91.0%	18.46%	-16.46%	-$4.52	NO

Net Edge = 2% (theoretical) - Spread

ACTIONABLE TRADES

Portfolio: 7 Markets × $25 = $175

#	Market	Side	Price	Spread	E(X)
1	49ers Super Bowl	NO	95.2%	0.11%	$0.50
2	Bears Super Bowl	NO	94.5%	0.11%	$0.50
3	Texans Super Bowl	NO	91.0%	0.11%	$0.52
4	49ers NFC Championship	NO	90.4%	0.22%	$0.49
5	Rob Jetten Netherlands PM	YES	95.8%	0.31%	$0.44
6	Tetairoa McMillan OROY	YES	92.3%	0.65%	$0.37
7	Jaxson Dart OROY	NO	96.0%	1.77%	$0.06
	TOTAL				**$2.88**

Category Diversification

Category	Markets	E(X)
NFL Super Bowl	3	$1.52
NFL Conference	1	$0.49
NFL Rookie Awards	2	$0.43
International Politics	1	$0.44

EXPECTED VALUE ANALYSIS

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Profit by Win Count (7 trades, $175 total)

E(X) by Edge Assumption

Probability of Profit (need 7+ wins out of 7)

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EXPECTED VALUE SUMMARY
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PORTFOLIO
  Trades: 7
  Capital: $175
  Avg price: 93.6%
  Win per trade: ~$1.73
  Lose per trade: -$25.00

BREAKEVEN
  Need 7 out of 7 wins to profit
  Breakeven rate: 100%

IF MARKET EFFICIENT (0% edge):
  E(X): $0.00
  P(Profit): 63%

IF 2% EDGE (research estimate):
  E(X): $2.90
  P(Profit): 73%
  ROI: 1.7%

IF 4% EDGE (optimistic):
  E(X): $6.71
  P(Profit): 85%
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E(X) Formula

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Net E(X) = Gross Edge - Spread
E(X) per trade = $25 × Net Edge / Price

Where:
  Gross Edge = 2% (from research, UNVALIDATED)
  Spread = Actual bid-ask from order book
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Portfolio Outcomes: 7 Trades

If ALL 7 win: +$13.19 profit (+7.5% ROI)
If 6 win, 1 loses: ~-$12 loss (-6.9% ROI)
If 5 win, 2 lose: ~-$37 loss (-21% ROI)

Probability Analysis

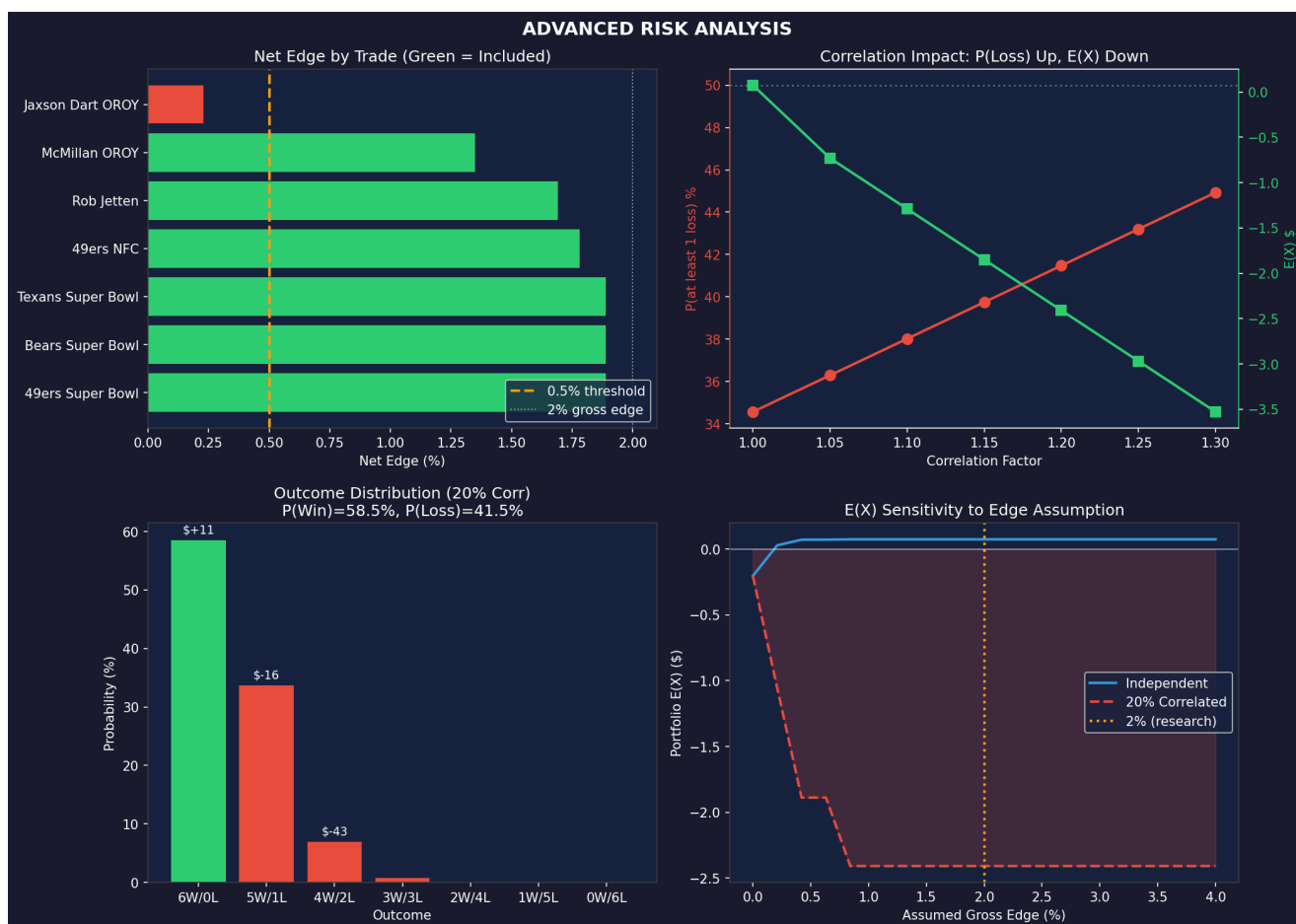| Wins	Probability (0% edge)	Probability (2% edge)	Profit
7/7	64.7%	74.8%	+$13.19
6/7	28.4%	22.0%	~-$12
5/7	6.2%	3.0%	~-$37
<5	0.7%	0.2%	worse

P(Profit) = P(7/7 wins)

- If market efficient: **64.7%**
- If 2% edge exists: **74.8%**

E(X) by Edge Scenario

Assumed Edge	Total E(X)	ROI	P(Profit)
0% (efficient)	$0.00	0.0%	64.7%
1%	$1.44	0.8%	69.5%
2%	**$2.88**	**1.6%**	**74.8%**
3%	$4.32	2.5%	79.8%
4%	$5.76	3.3%	84.5%

RISK ASSESSMENT

ADVANCED RISK ANALYSIS

Probability Analysis (with 20% correlation adjustment)

Metric	Independent	With Correlation
P(all 6 win)	65.4%	**58.5%**
P(at least 1 loss)	34.6%	**41.5%**
Expected wins	5.59 / 6	5.59 / 6
Expected losses	0.41 / 6	0.49 / 6

Outcome Probability Distribution (Correlated)

Wins	Losses	P(indep)	P(corr)	Profit	E(X) Contribution
6	0	65.4%	**58.5%**	+$11.02	+$6.45
5	1	28.9%	**33.7%**	-$15.81	-$5.33
4	2	5.2%	**7.0%**	-$42.65	-$2.97
3	3	0.5%	0.7%	-$69.49	-$0.51
≤2	≥4	<0.1%	<0.1%	-$96 to -$150	~$0

Critical insight: You need ALL 6 to win to profit. One loss wipes gains and goes negative.

Risk Metrics

Metric	Value
VaR 95%	-$42.65
VaR 99%	-$42.65
E(Loss | Loss)	-$21.37
Max Drawdown	-$150

Correlation Impact

5 of 6 trades are NFL-related. Correlation increases loss clustering:

Correlation	P(win)	P(loss)	E(L|L)
Independent	65.4%	34.6%	-$20.66
+10% corr	62.0%	38.0%	-$21.37
+20% corr	**58.5%**	**41.5%**	**-$21.37**
+30% corr	55.1%	44.9%	-$21.37

Position Sizing

With $150 across 6 markets:

- Max loss per market: $25 (17% of portfolio)
- If all lose: $150 (100%)
- Single loss impact: -$16 (wipes +$11 gain)

PROJECTIONS

Single Round ($150 deployed, ~3-4 week settlement)

Timeline: NFL markets settle by Super Bowl (Feb 9, 2026). Rob Jetten market TBD.

Scenario	P(outcome)	Profit	Final Value
All 6 win	58.5%	+$11.02	$161.02
5 win, 1 lose	33.7%	-$15.81	$134.19
4 win, 2 lose	7.0%	-$42.65	$107.35
Worse	<1%	-$69+	<$81

Expected Value (with 20% correlation):

- If 2% edge exists: ~+$0.07 (barely positive)
- If 0% edge: ~-$0.20 (spread cost)

RECOMMENDATION

Execute Now (6 trades)

Market	Side	Price	Spread	Edge/Spread	Amount
49ers Super Bowl	NO	95.2%	0.11%	17.2x	$25
Bears Super Bowl	NO	94.5%	0.11%	17.2x	$25
Texans Super Bowl	NO	91.0%	0.11%	17.2x	$25
49ers NFC	NO	90.4%	0.22%	8.1x	$25
Rob Jetten NL PM	YES	95.8%	0.31%	5.5x	$25
McMillan OROY	YES	92.3%	0.65%	2.1x	$25

Total: $150

Do Not Trade

Market	Reason
Jaxson Dart OROY	Edge/Spread = 0.1x (too thin)
McCaffrey Comeback	Spread > edge
DOGE Cuts	Spread > edge
Protector of Year	Spreads 8-18%

Track These Metrics

1. **Fill price vs. mid price** — actual slippage
2. **Resolution outcomes** — build dataset to validate edge
3. **Cumulative P&L** — does realized return match expected?

APPENDIX

Visualizations

File	Description
advanced_risk_analysis.png	**4-panel risk analysis with correlation**

File	Description
honest_summary.png	Market distribution by probability zone
honest_distribution.png	Probability zone breakdown
expected_value_analysis.png	E(X) scenarios and projections
specific_trades.png	Trade-level analysis

Data Sources

- **Prices/Spreads:** Polymarket CLOB API (live order books)
- **Research:** Kahneman & Tversky (1979), Snowberg & Wolfers (2010)
- **Fee Structure:** Polymarket Documentation

Methodology Notes

1. **Spread calculation:** (Best Ask - Best Bid) / Midpoint × 100
2. **Net edge:** Assumed 2% gross edge (from research) minus actual spread
3. **E(X):** $25 × Net Edge / Price
4. **Probability:** Product of individual market probabilities (assumes independence)

Generated: January 16, 2026
Data: Live Polymarket API with real order book spreads
Status: Theoretical edge UNVALIDATED on Polymarket