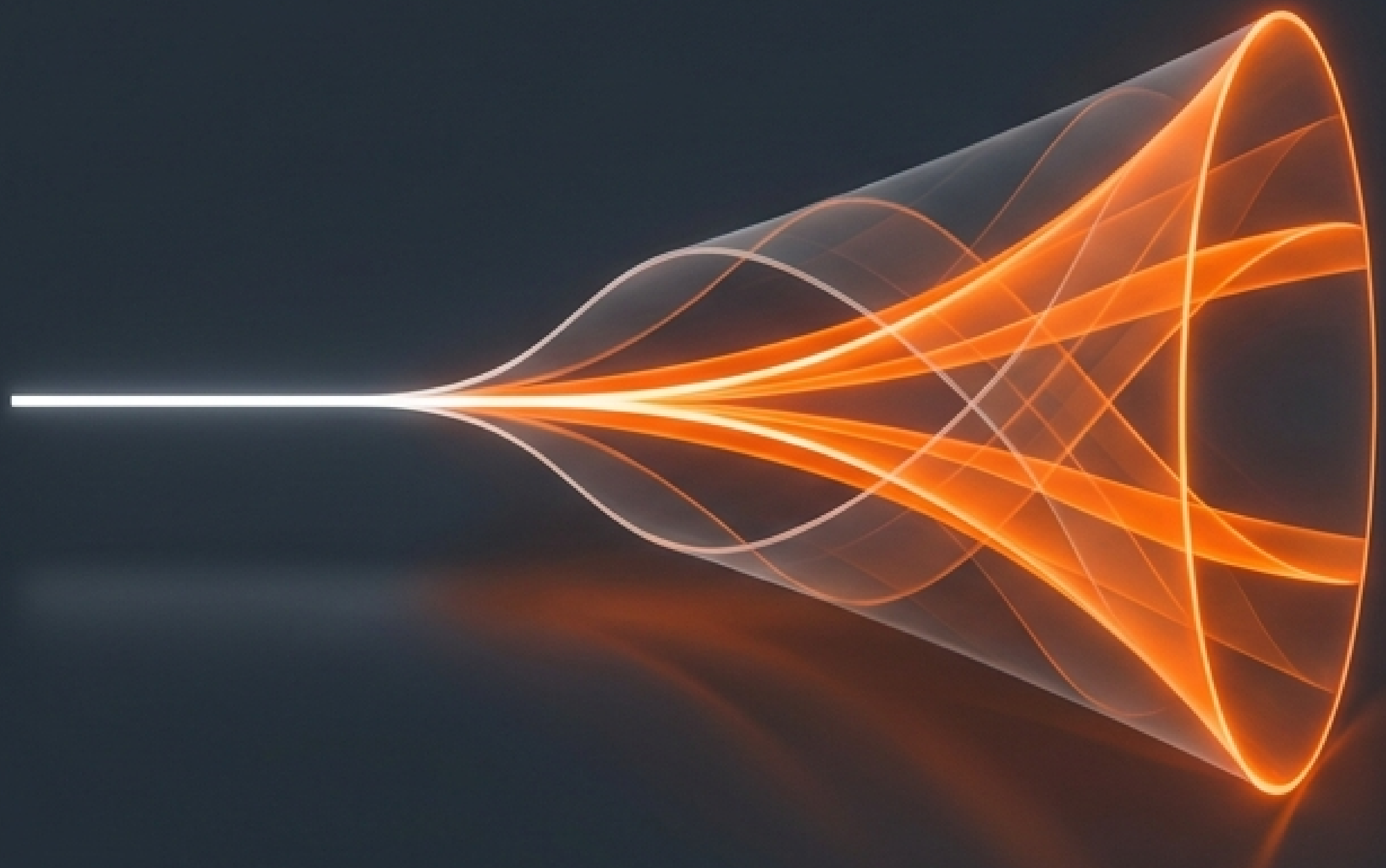

Precision Through Probability

The evolution of private asset cash flow forecasting.

A proprietary framework by Aspequity.

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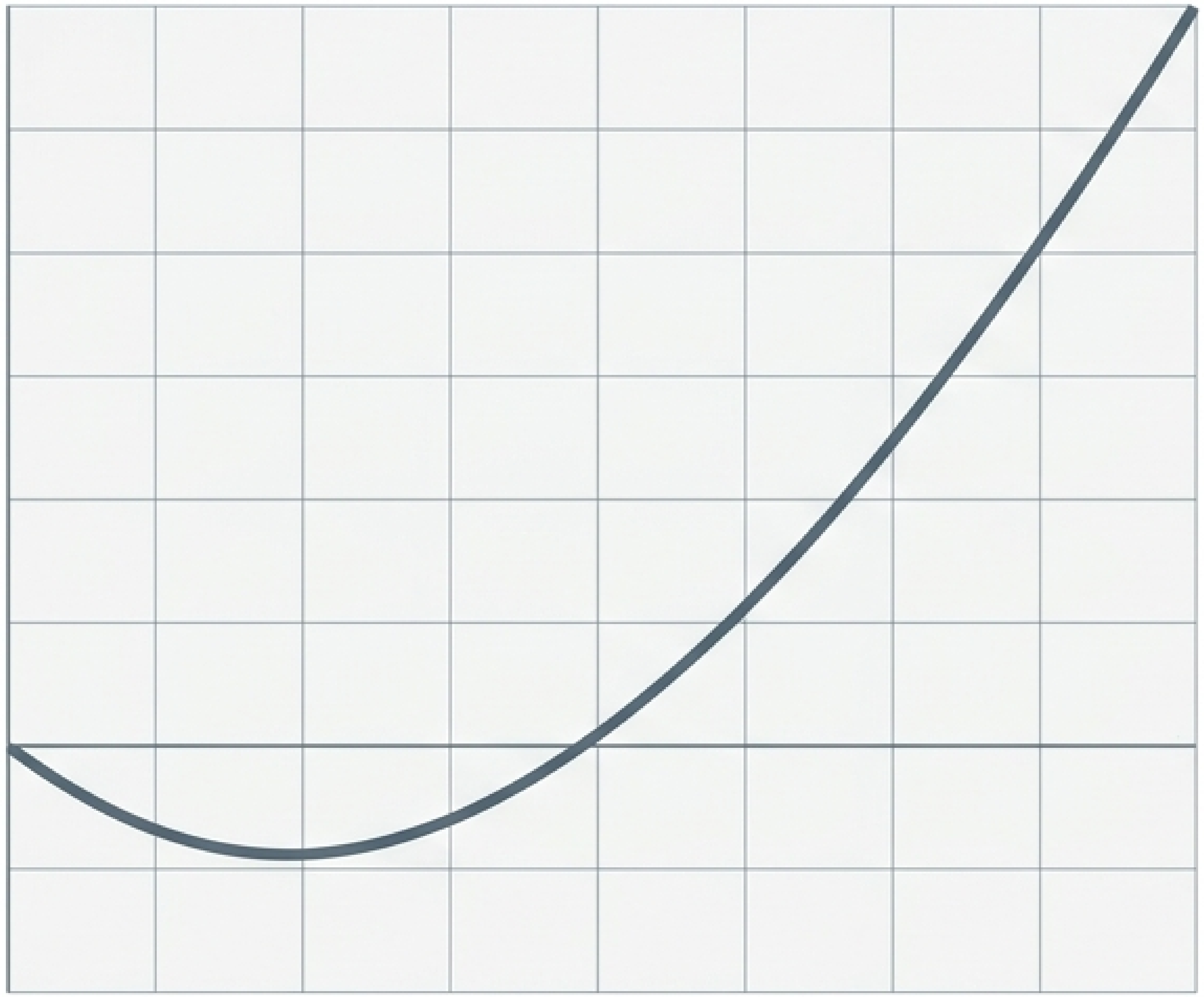
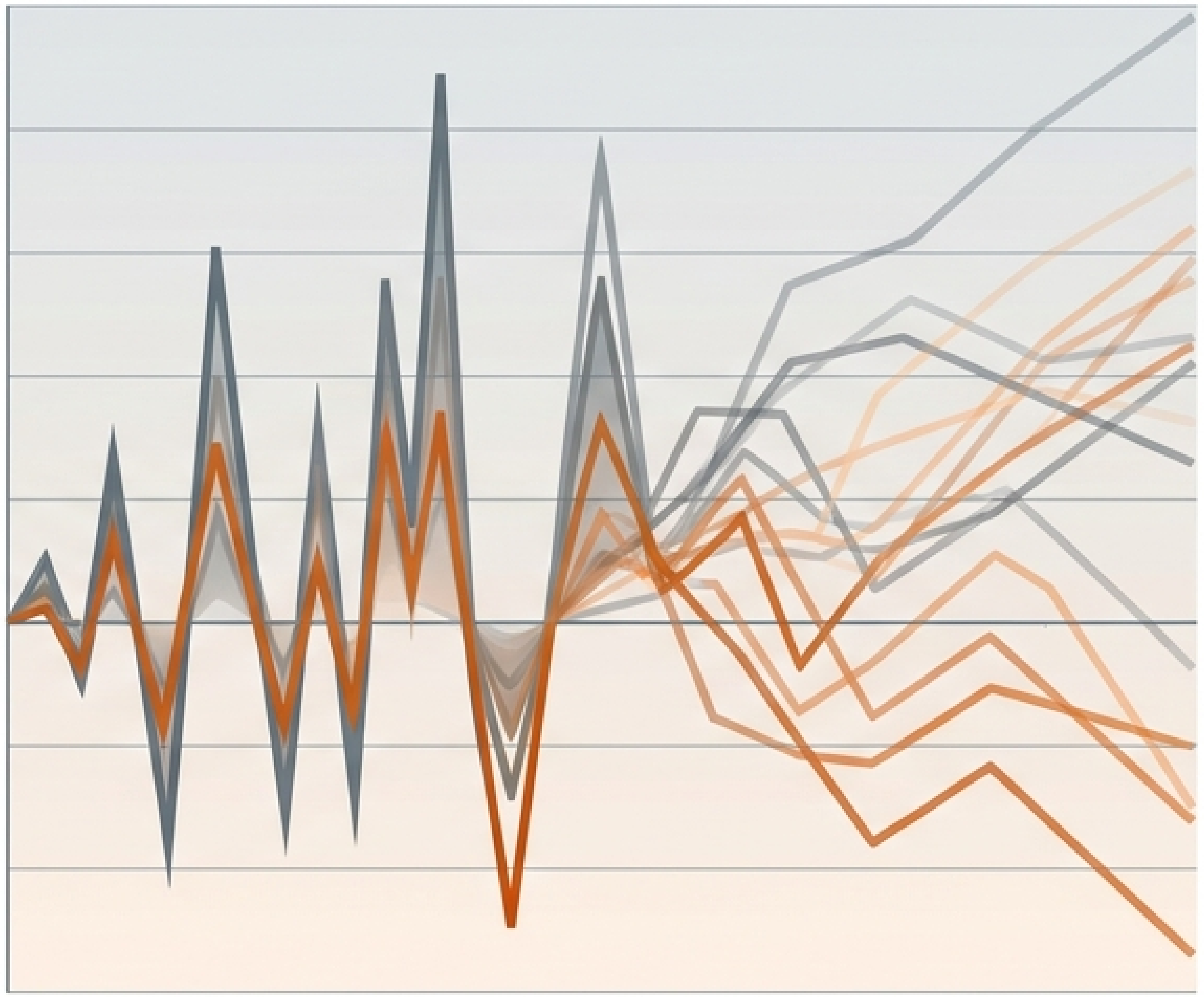
The Deterministic Illusion: Expecting public-market predictability



The Private Market Reality: Illiquidity, varying realization paths, and GP discretion



The traditional ‘average cumulative cash flow’ follows a deterministic pattern, but relying on a single mean line exposes institutional portfolios to severe liquidity mismatches.

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Generation I (Indirect)	Generation II (Direct Deterministic)	Generation III (Direct Probabilistic)
Historical IRR Models (e.g., Kaplan, Schoar) Mechanism: Indirect (formulaic percentage of IRR).	The Yale Model (Takahashi & Alexander) Mechanism: Direct cash flow modeling.	The BOSTON Model (Aspequity) Mechanism: Direct cash flow + infusing underlying asset volatility.
Liquidation Assumption: Generic and static.	Liquidation Assumption: Static rate of deal liquidation.	Liquidation Assumption: Dynamic, GP-controlled liquidation.
Output: Deterministic mean line.	Output: Deterministic independent contribution/distribution curves.	Output: Probabilistic cash flow distributions.

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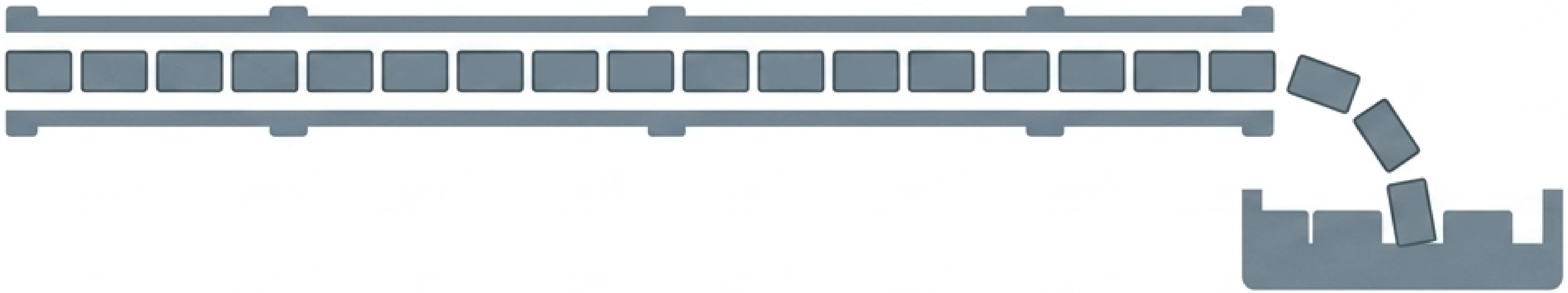
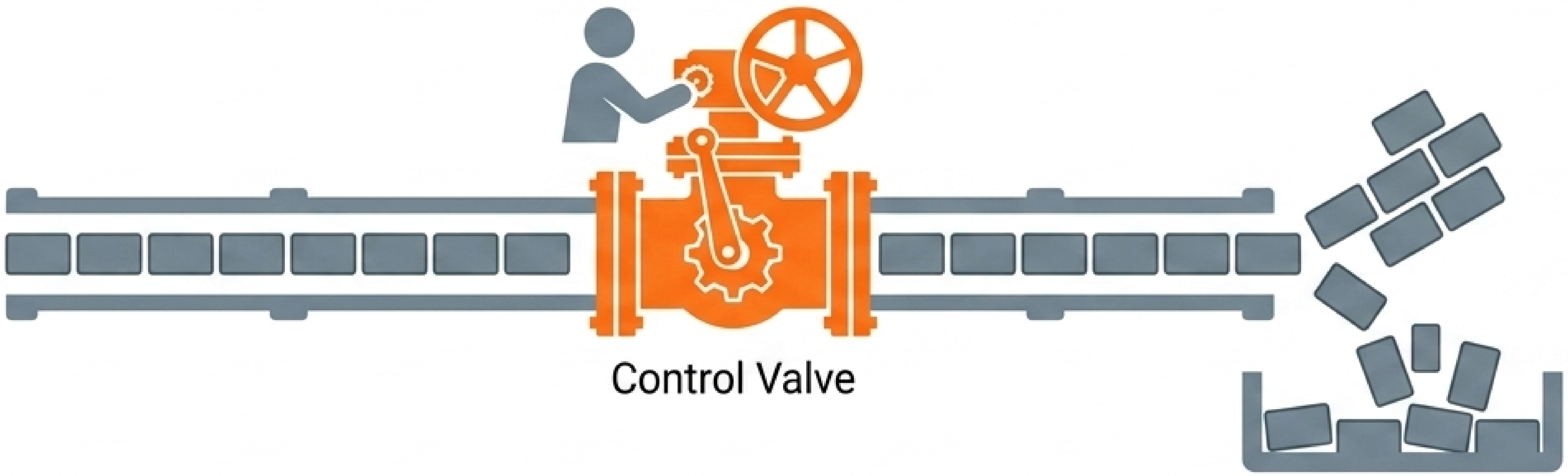


Legacy Assumption:
Underlying deals become ripe for liquidation at a fixed, static rate over time.



The BOSTON Reality:
General Partners control and adjust the rate at which they put deals to market based on macro conditions.

By parameterizing this additional degree of freedom, the Bow-Speed Time-Option Normalized (BOSTON) model mirrors observable fund behavior rather than academic theory.

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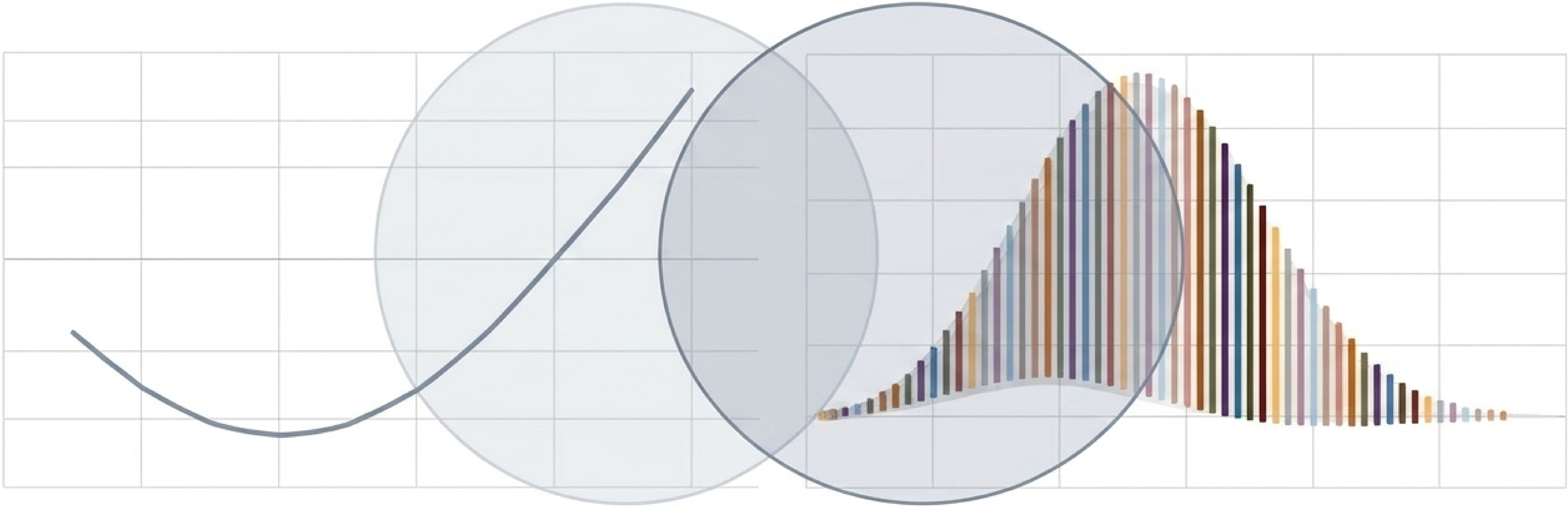
Uncertainty is not a flaw in the forecast; it is an economic reality that must be quantified.

aspequity



To generate a true picture of investment performance, BOSTON extracts volatility forecasts from underlying investments using best-of-breed risk models, and infuses this data directly onto expected cash flow schedules.

The 'average' cash flow pattern is replaced by a high-fidelity probability distribution of actual outcomes.

BOSTON

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The Scale of Precision.

10^{21}

The Engine

BOSTON operates within EXPLO, Aspequity’s AICPA/IPEV-compliant risk-aware valuation model.

The Calculation

Instead of drawing a single trendline, the engine explores a sextillion (10^{21}) possible future realization paths for every single investment.

The Speed

This complex combinatorial analysis is executed in a matter of seconds, providing unparalleled insight into potential cash flow divergence.

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The LP Perspective (Liabilities & Surplus)

Goal: Avoiding unplanned liquidity shortages.

BOSTON Application:

- Quantifies the precise magnitude of potential cash flow shortages relative to future liabilities—pension outlays, redemptions, capital expenditures, and unfunded commitments in other partnerships.

The GP Perspective (Capital Calls & Deal Flow)

Goal: Optimizing capital allocation.

BOSTON Application:

- Predicts both the amount and the variation of future distributions.
- Allows GPs to optimize capital call schedules, plan firm resources efficiently, and execute deal flow without over-leveraging.

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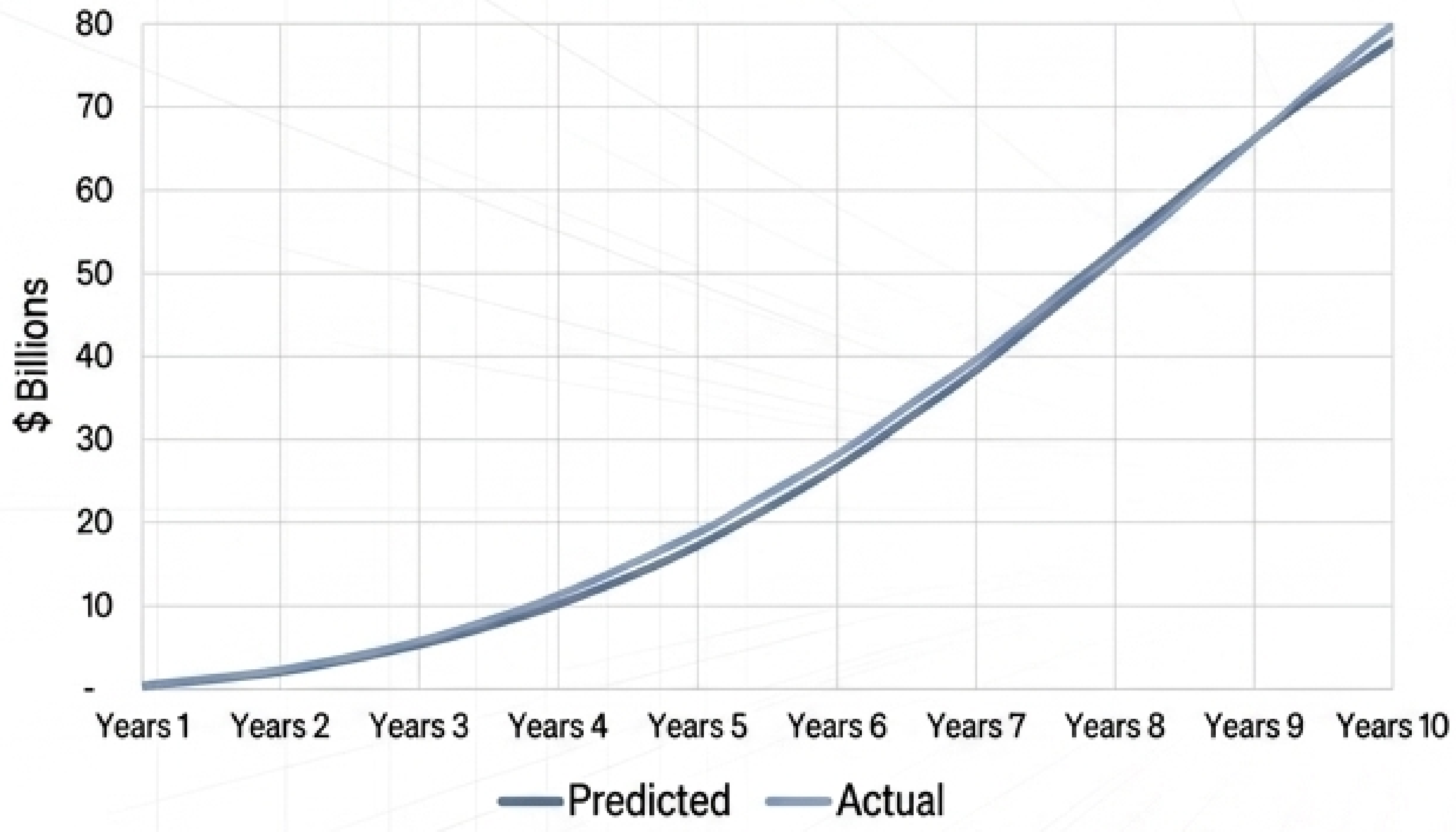
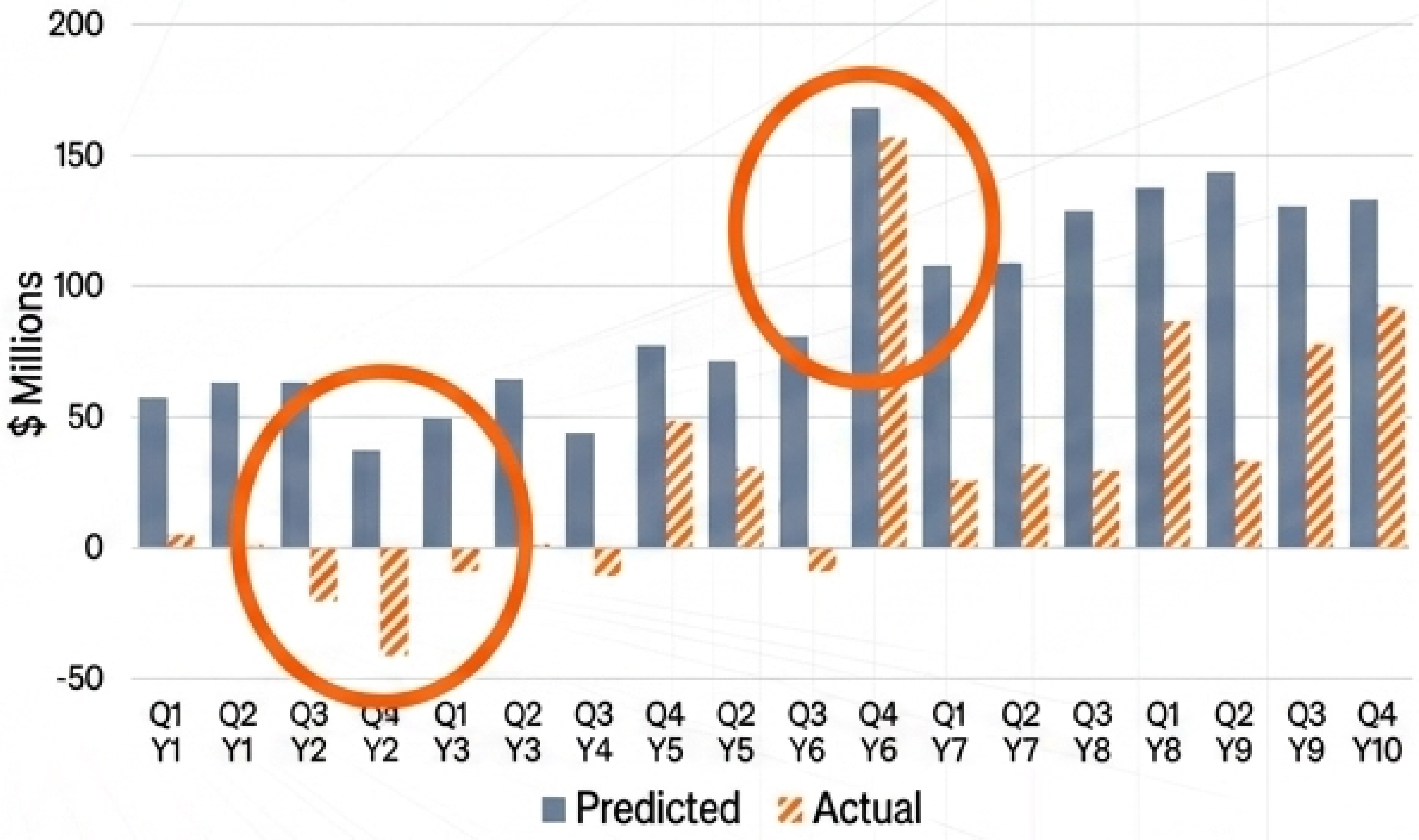
Chart A (Cumulative - The Illusion)



Cumulative cash flow comparisons hide underlying volatility because model errors cancel out and diversify over the lifetime of the fund due to secular time trends.

Chart B (Periodic - The Uncompromising Metric)



Periodic forecasting exposes the truth. Investors experience liquidity crunches in specific periods—not over 10-year cumulative averages.

A forecasting model must be judged on its explanatory power over periodic distributions and contributions.

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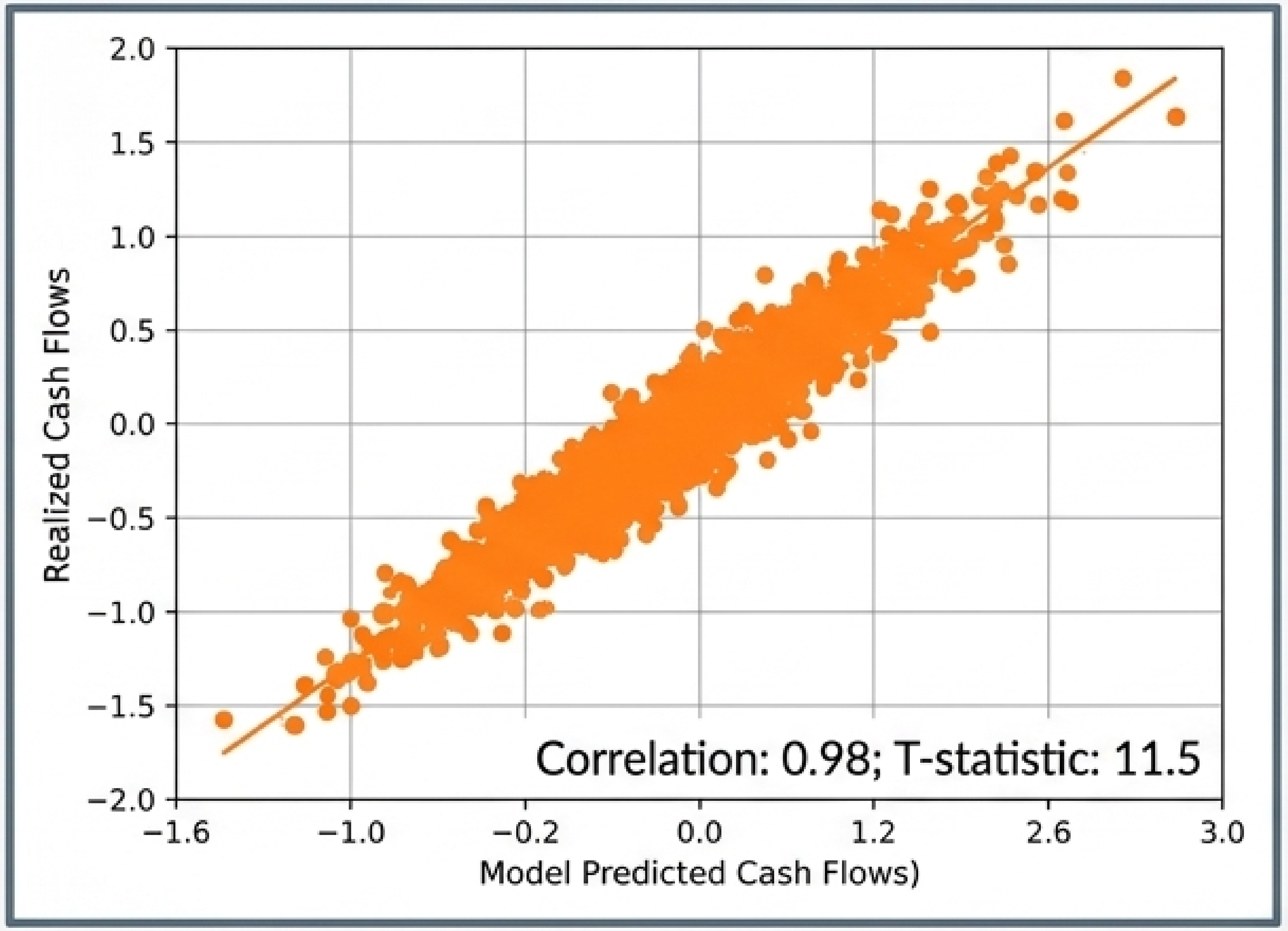
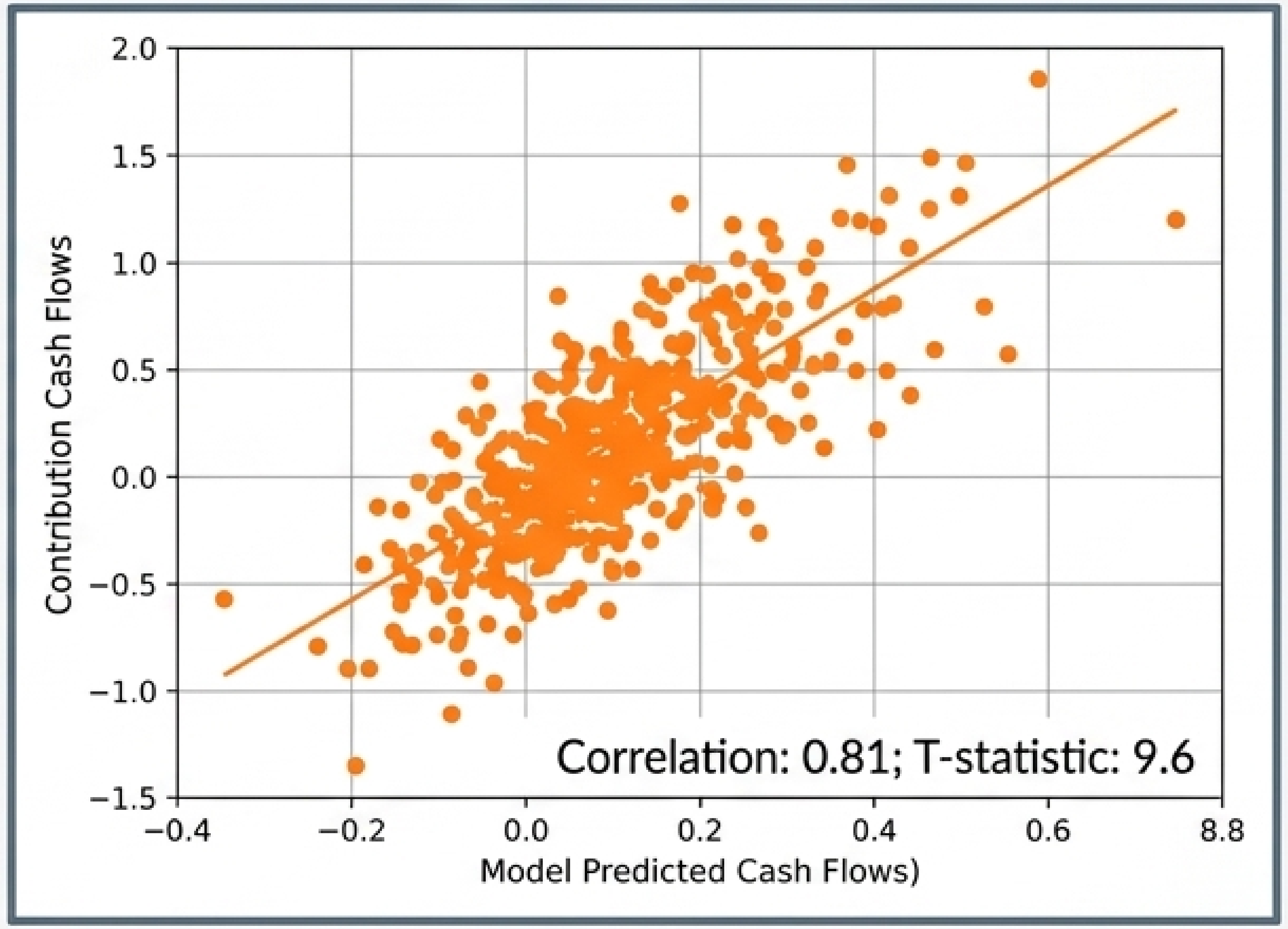
Out-of-sample resilience over in-sample over-fitting.

Fund Distributions



Fund Contributions



Unlike complex machine learning algorithms that over-fit past data and obscure transparency, BOSTON utilizes an intuitive econometric estimation approach that holds its predictive power out-of-sample.

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From Data Grids to Decision Surfaces.

Period	lower 99%	lower 95%	lower 90%	lower 75%	high 75%	high 90%	high 95%	high 99%	average
Q1	-75,269,915	-73,682,570	-72,624,225	[illegible]	-67,882,075	-66,274,730	-65,216,500	-63,629,040	-49,442,402
Q2	-11,101,548	-7,167,485	-6,052,999	[illegible]	4,044,417	7,073,604	8,588,200	12,122,265	517,000
Q3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	56,470,635	59,582,190	64,246,580	46,624,105
Q4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	96,908,430	[illegible]	[illegible]	82,798,620
Q5	[illegible]	92,426,190	[illegible]	[illegible]	[illegible]	114,008,950	[illegible]	[illegible]	113,787,750
Q6	108,089,075	115,159,650	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	148,432,900
Q7	132,819,150	144,641,190	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	181,398,700
Q8	158,443,550	174,506,750	[illegible]	[illegible]	[illegible]	[illegible]	254,918,150	270,880,200	214,670,800
Q9	184,604,000	202,487,400	[illegible]	229,082,950	[illegible]	[illegible]	293,132,700	331,015,200	247,509,900
Q10	256,038,300	[illegible]	[illegible]	291,998,850	[illegible]	[illegible]	327,388,650	334,160,300	320,073,250
Q11	241,474,700	[illegible]	266,325,000	281,235,950	314,788,900	[illegible]	336,703,750	354,546,150	288,014,450
Q13	278,735,850	[illegible]	290,097,000	252,784,250	283,088,700	[illegible]	384,448,350	315,810,490	285,976,980
Q14	28,742,950	[illegible]	78,995,100	77,238,350	38,411,100	[illegible]	50,026,950	92,591,950	28,395,150
Q15	12,549,000	13,042,725	13,983,975	13,974,780	14,654,565	[illegible]	15,758,165	16,475,450	14,148,700
Q16	6,010,567	6,211,507	6,321,519	6,510,518	6,926,738	7,115,706	7,225,749	7,424,677	6,718,657
Q27	2,503,990	2,582,555	3,625,439	2,687,830	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Q28	889,972	915,619	928,967	954,089	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Q29	258,657	265,575	269,444	275,991	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Q30	57,421	58,862	58,664	61,001	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Q31	8,628	8,629	9,940	9,128	9,546	6,733	9,646	10,047	6,537
Q32	685	680	688	701	731	744	732	707	[illegible]

Insight: Instantly visualizing the exact probability of realizing a specific cash flow threshold by a specific quarter, allowing for risk-adjusted liquidity planning.

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Aspequity: & Empowering Private Market Decisions. hey keep it [illegible] tose fit and out.

We provide powerful analytics to a global client base of LPs, GPs, data platforms, and investment consultants across private equity, venture, private debt, real estate, and infrastructure.

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