

Equity Value, Issuance, and Investment: Thirteen Identities and Unstable Evidence

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VERSION	0.1.0
RELEASED	23 August 2026
REGISTRY KEY	equity_value_investment
STATUS	Working paper preprint / not peer reviewed

Research simulation and, where explicitly identified, Alpaca paper evidence. No funded performance, peer review, independent replication, external acceptance, or future return is claimed.

Short title: Equity value and investment: complete trial lineage
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Research system: ALPHAC / AlphaForge
Family key: equity_fundamental_value_investment
Status: public research record; not peer reviewed; not an investment solicitation
Evidence date: 2026-08-22

Abstract

ALPHAC recorded 13 equity value/investment identities: book-to-price, earnings yield, sales-to-price, accruals, asset growth, net issuance, investment-to-revenue, a value composite, and 52-week-high context. Eleven have finite immutable Sharpe measurements ranging from -0.9676 to +0.8276; nine of those 11 are negative. Accruals and one net-issuance run are non-finite. Asset growth flips from -0.6858 over 2018–2021 to +0.8276 over 2000–2026, while both book-to-price runs are negative. This is specification and data-instability evidence, not a validated return family.

Economic hypotheses and literature

Value ratios ask whether prices are low relative to accounting fundamentals. Investment factors ask whether aggressive asset growth or security issuance predicts lower subsequent returns, possibly through overinvestment, mispricing, or financing flows. Accruals ask whether cash and accounting components of earnings have different persistence.

The Fama–French five-factor model formalizes value, profitability, and investment factors ([Journal of Financial Economics](#)). Cooper, Gulen, and Schill document the asset-growth effect ([Journal of Finance](#)). Pontiff and Woodgate study shares outstanding and cross-sectional returns ([SSRN source record](#)). These are priors, not validation of ALPHAC's formulas, timestamps, universe, or execution.

Value, investment, issuance, profitability, and momentum overlap mechanically and empirically. The taxonomy groups these 13 implementations into one family-level evidence burden; it does not present each accounting ratio as an independent sleeve.

Complete family accounting

Signal group	Identities	Persisted Sharpe evidence
eq_asset_growth	2	-0.6858 and +0.8276
eq_book_to_price	2	-0.9676 and -0.3219
eq_net_issuance	3	-0.3113, -0.1289, and non-finite
eq_ilrev	1	+0.6911
eq_earnings_yield	1	-0.5526
eq_sales_to_price	1	-0.5185
eq_value_composite	1	-0.5994
eq_52whigh_252	1	-0.2895
eq_accruals	1	non-finite
Total	13	11 finite; 2 positive; 2 non-finite

Each row remains charged to the 228-identity union. The machine packet includes exact hypothesis and configuration hashes, source-ledger hashes, observation counts, and available moments. It does not invent results for non-finite measurements.

The strongest finite identity, long-history asset growth at +0.8276, is contradicted by the shorter asset-growth run at -0.6858 and carries skew +7.5222 with kurtosis 188.87. The positive investment-to-revenue identity has skew +16.5759 and kurtosis 591.70. Several negative runs have equally extreme tails. Point estimates from such summary-only evidence cannot establish a stable return process.

Missing evidence and decision

The family audit has no complete curve binding for these 13 specific identities, so maximum drawdown, DSR, PBO, capacity, and crisis correlation remain unmeasured. Historical documents and some related artifacts may discuss individual signals, but they do not form a complete, identity-matched family packet. The public packet says so explicitly.

No result is admitted, no Alpaca sleeve carries this family, and no live broker return is assigned to it. A repurchase/issuance feasibility programme is separate forward research; it cannot validate these legacy summaries retroactively.

Decision: NOT ESTABLISHED / RESEARCH ONLY. Zero sleeves. Admission requires one newly frozen point-in-time specification, exact filing availability and issuer identity, survivorship and delisting controls, borrow and costs, persisted curves, current-union deflation, capacity, crisis diversification, and broker-reconciled forward evidence.

Reproduction and credit

- `docs/design/PREREG_FUNDAMENTAL_SINGLES.md` : historical single-factor specification.
- `docs/design/PREREG_SLEEVE4_INVESTMENT.md` : asset-growth preregistration.
- `docs/design/LITERATURE_REPURCHASE_ISSUANCE_FLOW.md` : issuance literature and overlap boundary.
- `scripts/audit_equity_fundamental_families.py` : deterministic family audit.
- `/glassbox/equity_value_investment_family.json` : machine-readable packet.
- `/glassbox/trial_packet_manifest.json` : global join.

This research and ALPHAC implementation were authored and directed by **Arhan Canli**, Founder of Canli Capital. The public hashes support scrutiny; they do not imply peer review or future return.

References

1. Eugene F. Fama, Kenneth R. French (2015). *A five-factor asset pricing model*. Journal of Financial Economics. <https://doi.org/10.1016/j.jfineco.2014.10.010>
2. MICHAEL J. COOPER, HUSEYIN GULEN, MICHAEL J. SCHILL (2008). *Asset Growth and the Cross-Section of Stock Returns*. The Journal of Finance. <https://doi.org/10.1111/j.1540-6261.2008.01370.x>
3. Jeffrey Pontiff, Artemiza Woodgate (2005). *Shares Outstanding and Cross-Sectional Returns*. . <https://doi.org/10.2139/ssrn.679143>