

Monte Carlo Risk Report

Model Version: **Freeze V3** (bullet maturity + refinance cliff + liquidity tail)

Run ID: **20260220_130307**

Key Metrics

- Expected Total Net Income: **\$30,348,131**
- 5th Percentile (Worst 5%): **\$-28,652,168**
- Probability of Loss: **15.65%**

Equity Return Metrics

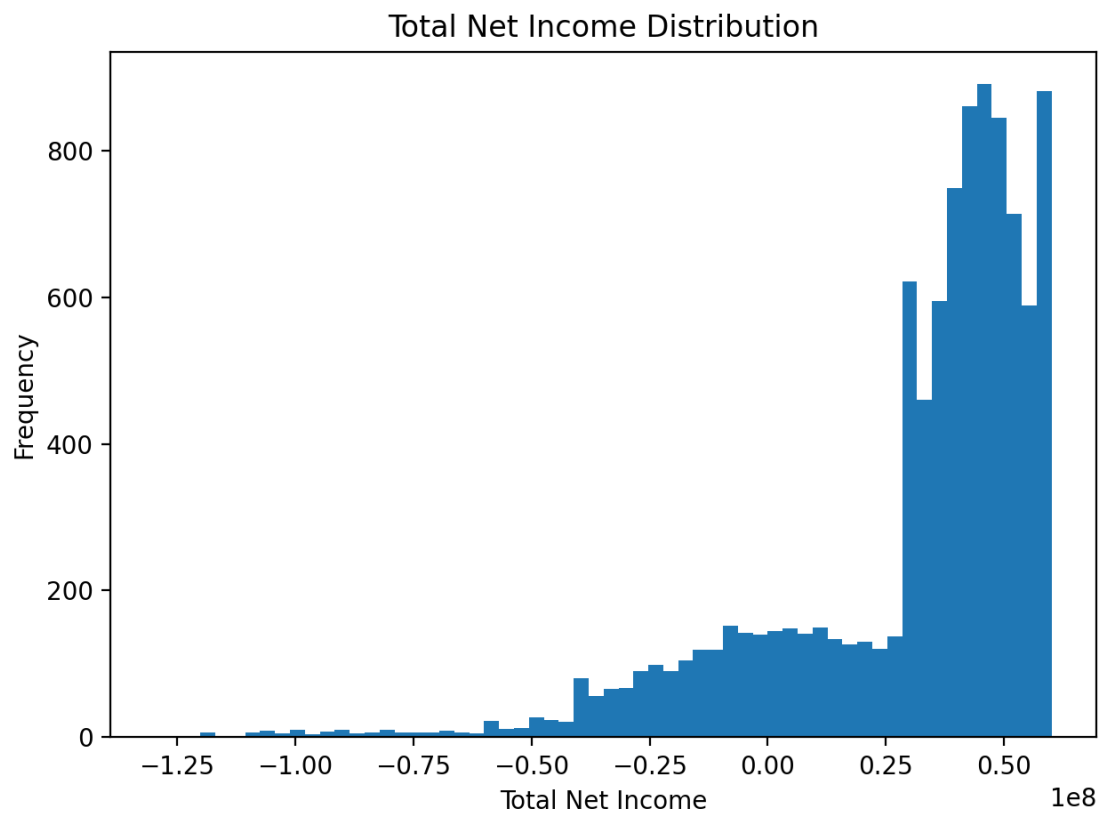
- Equity Return (mean): **151.74%**
- Equity Return (5th pct): **-143.26%**
- Probability of Equity Loss: **15.65%**

Config Snapshot (selected)

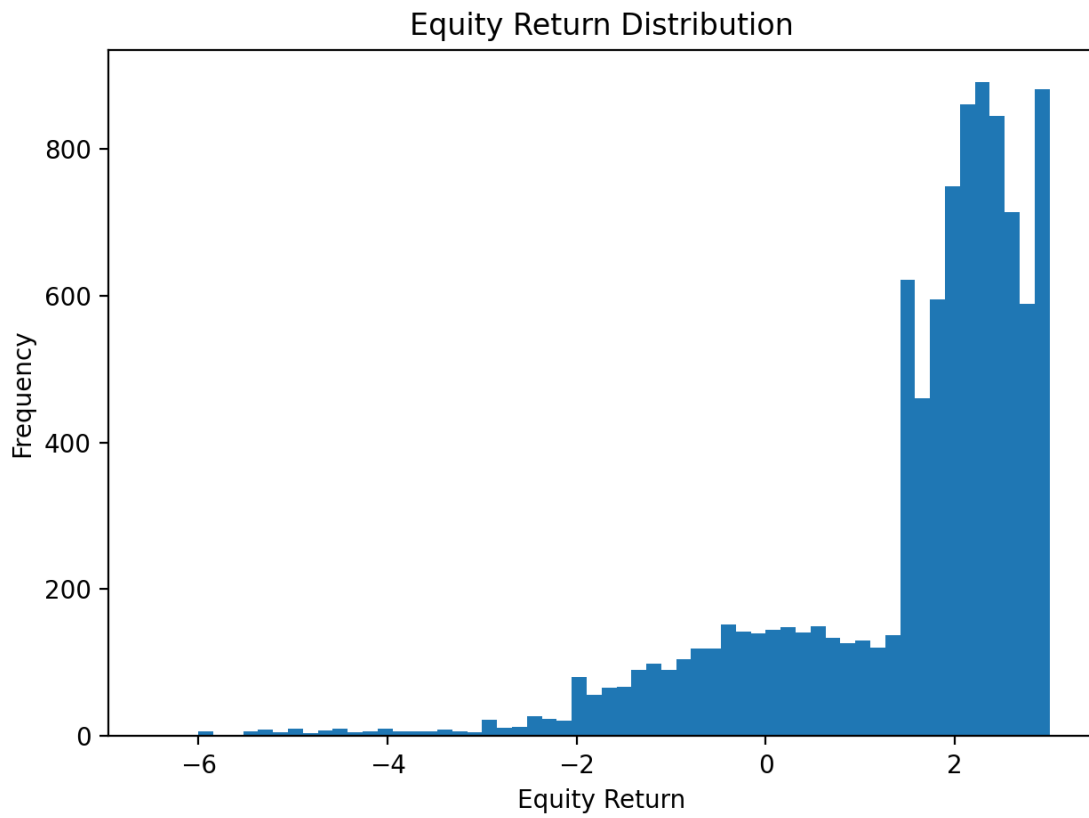
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Figures

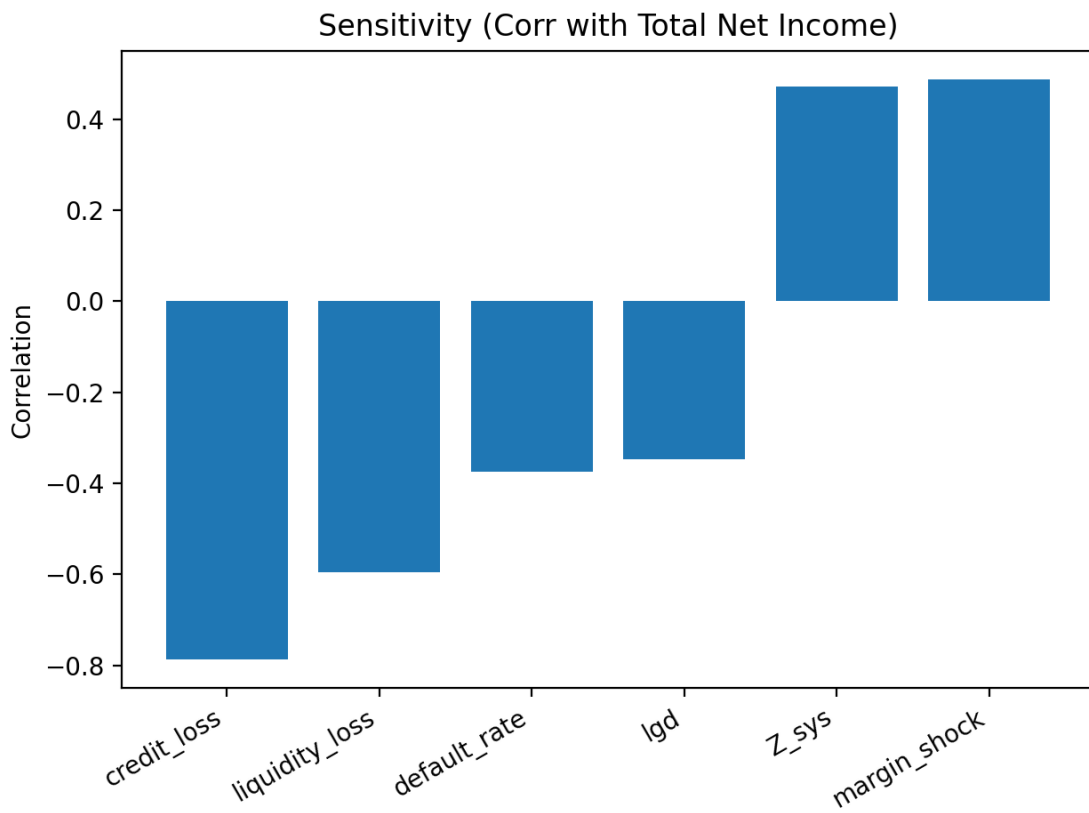
ni_distribution.png



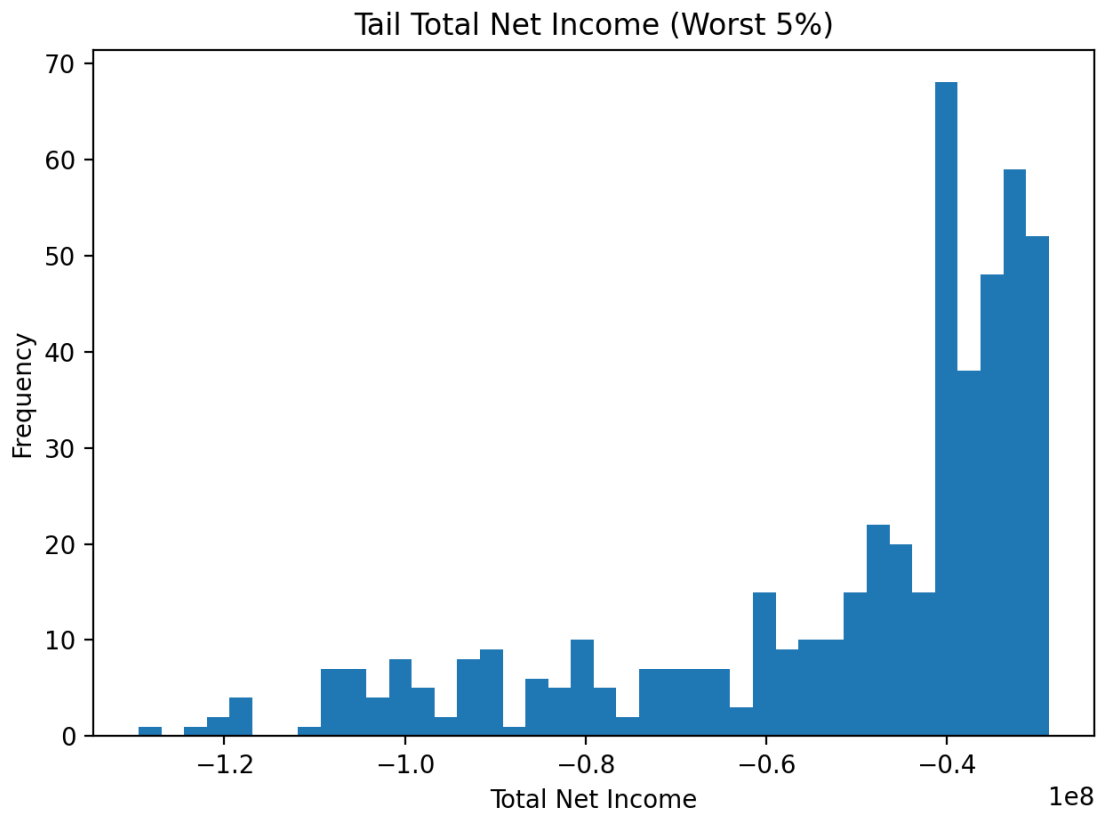
equity_return_distribution.png



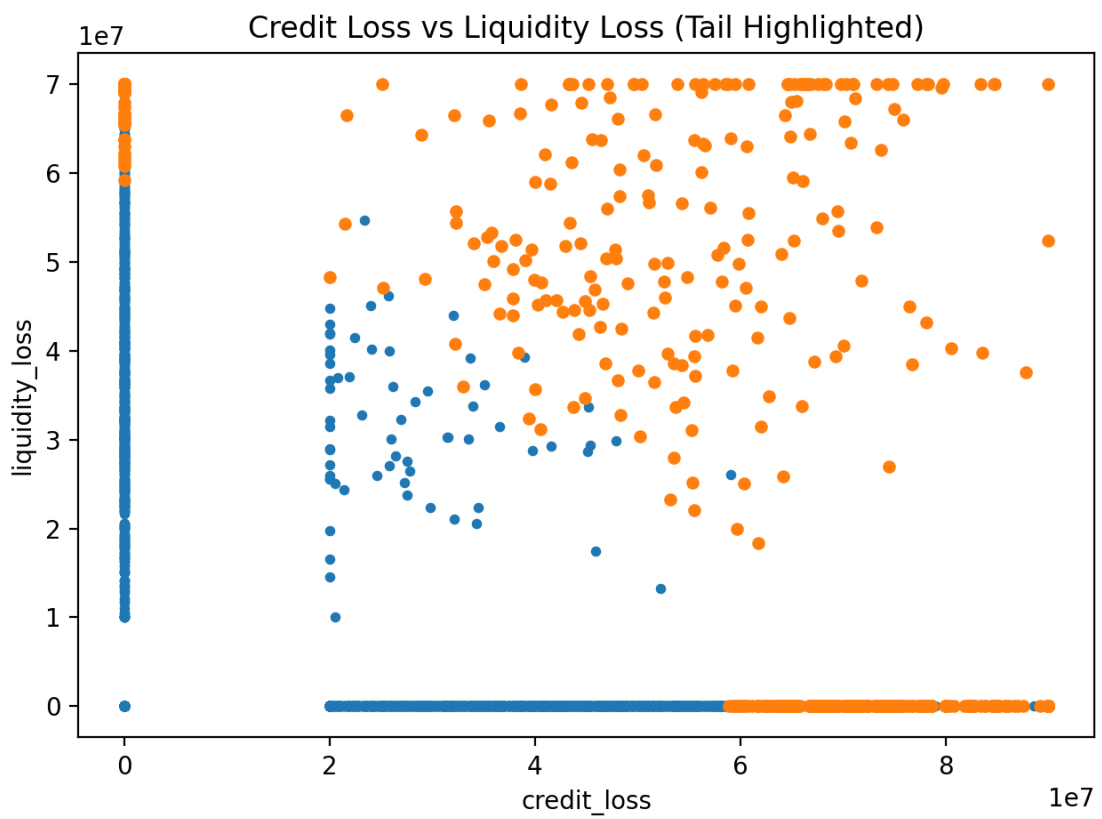
sensitivity_corr.png



tail_total_net_income.png



credit_vs_liquidity_scatter.png



Tail Decomposition & Drivers

Scope	N	NI mean	NI p5	NI min	Credit mean	Credit p95	Credit max	P(credit>0)	Liq mean	Liq p95	Liq max	P(liq>0)
ALL	10000	\$30,348,131	\$-28,652,168	\$-129,484,583	\$9,934,664	\$58,215,768	\$90,000,000	22.41%	\$4,650,665	\$43,005,376	\$70,000,000	10.86%
TAIL_WORST_5PCT	500	\$-51,325,486	\$-102,834,542	\$-129,484,583	\$52,812,971	\$87,101,178	\$90,000,000	82.20%	\$34,258,072	\$70,000,000	\$70,000,000	58.80%

Drivers (Correlation with Net Income)

- Corr(NI, credit_loss): **-0.786**
- Corr(NI, liquidity_loss): **-0.595**
- P(liquidity_loss > 0): **10.86%**