Section 6 — Results & Findings

Pure'O Naturals — Data-backed insights with operational recommendations

Table of Contents

Data sources: high_volatility_products.csv, rolling_volatility.csv, low_margin.csv, abc_classification.csv, slow_movers.csv, pricing_misalignment_top20.csv, price_variance_statistics.csv

6.1 Revenue Volatility (CV)

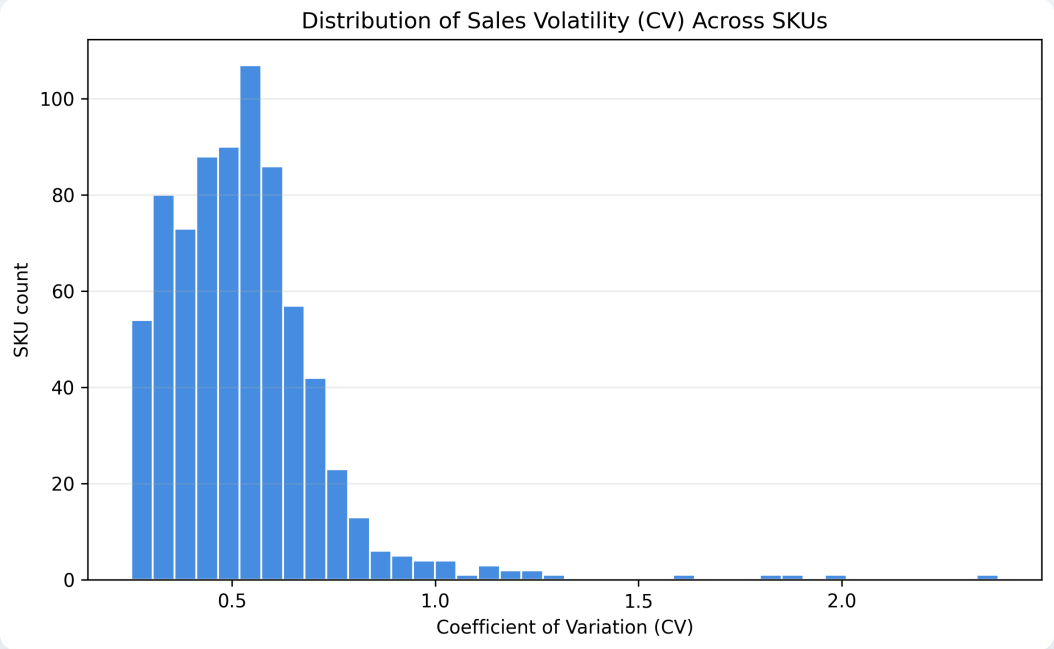

Figure 6.1 — Distribution of sales volatility (CV) across SKUs.

O — Observation

Across the portfolio, **746** SKUs exhibit coefficient of variation (CV) above 25%, indicating substantial demand volatility. The worst ten SKUs show CVs ranging from 116.7% up to 238.6%, which materially impacts forecasting and stocking accuracy.

R — Rationale

High CV typically reflects seasonality, promotion windows, and product mix transitions. In produce, supply-side variability interacts with demand spikes, creating asymmetric risk where stockouts and overstock can co-exist within weeks.

I — Implication

Volatility above 25% correlates with increased stockout risk and carrying costs. Targeted smoothing via safety stock rules and promotion governance can mitigate loss of sales while avoiding inventory write-down.

R — Recommendation

Prioritize volatility dampening for the top decile SKUs using weekly replinishment cadence, demand shaping (bundles), and substitution pathways for highly erratic items.

6.2 Rolling Volatility by Month

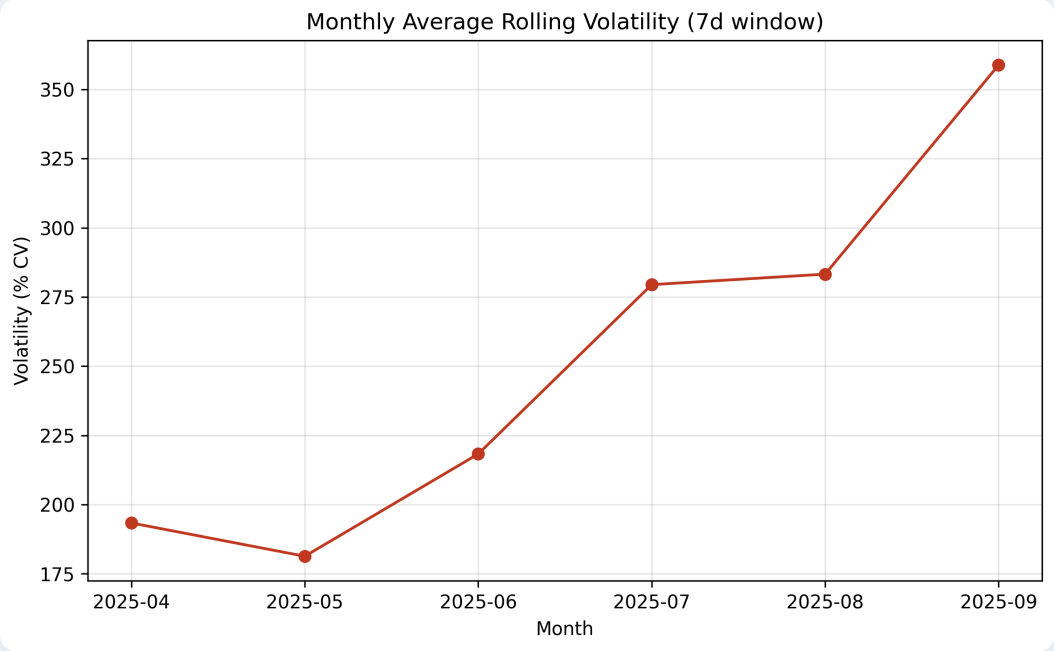

Figure 6.2 — Average 7-day rolling volatility per month.

O — Observation

Monthly volatility concentrates around April (193.4%), June (218.3%), and September (358.9%), consistent with seasonal peaks and back-to-school cycles.

R — Rationale

Observed cycles align with category demand drivers (fruits and beverages), festival timing, and supplier pricing bandwidths, translating into volatility shocks.

I — Implication

Peak months require proactive inventory ramp with allocated working capital bands; trough months warrant markdown governance and cross-category promotions.

R — Recommendation

Adopt tiered readiness: lock supplier SLAs ahead of June, flex markdown playbooks post-peak, and harden substitution matrices for erratic categories.

6.3 Margin Analysis

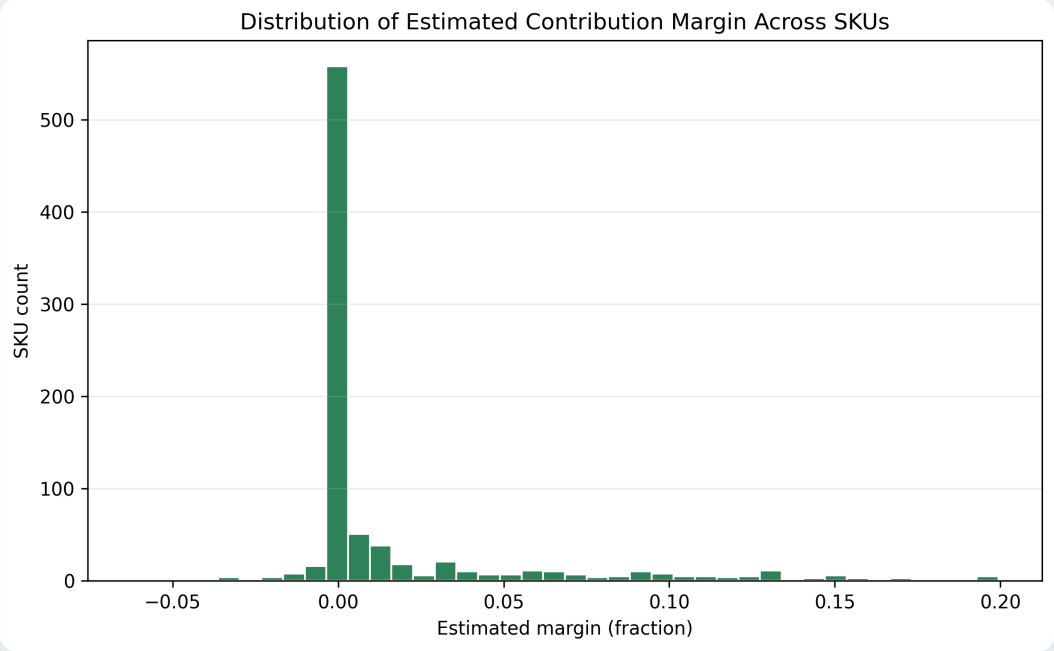

Figure 6.3 — Contribution margin distribution across SKUs.

O — Observation

846 SKUs operate below the 15% margin threshold, with **95** products in negative margin. Aggregate margin-at-risk tallies to ₹ 2242359.16 based on current price-cost proxies.

R — Rationale

Margin erosion clusters in high-velocity produce with tighter spreads and dairy SKUs with price rigidity. Opaque cost swings and uncontrolled discounting drive the gap to 20% target.

I — Implication

Unaddressed, low-margin segments depress contribution and constrain working capital, raising exposure to write-downs on perishable inventory.

R — Recommendation

Execute a two-tier play: immediate price hygiene for sub-10% items; structural renegotiation and pack-size optimization to move clusters to ≥20% margin.

6.4 ABC Classification (Pareto)

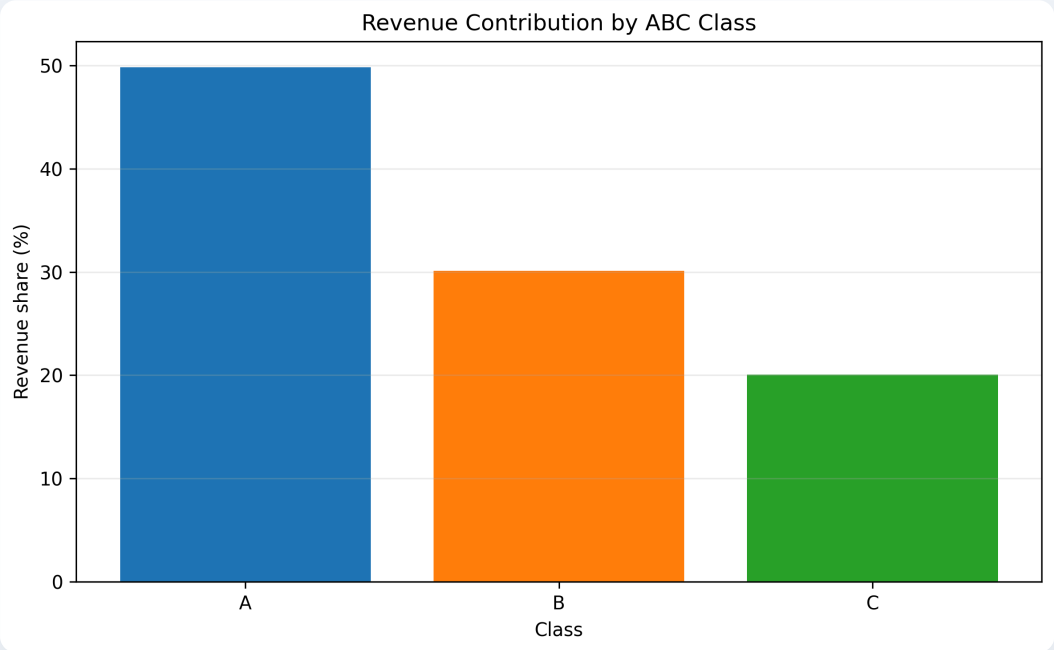

Figure 6.4 — Revenue share by ABC class.

O — Observation

Class composition shows A-tier concentration with revenue shares A: 49.8%, B: 30.1%, C: 20.0%. Class counts: {'C': 821, 'B': 98, 'A': 39}.

R — Rationale

Concentrated revenue distribution indicates dependency on limited SKUs; strategic resilience demands margin discipline and supply continuity for A-tier.

I — Implication

Operational governance must prioritize A-tier replenishment and B-tier optimization, while C-tier rationalization reduces tail complexity without revenue penalty.

R — Recommendation

Institute ABC-led SLA tiers, differentiated promos, and replenishment cadence to lock A-tier consistency and lift B-tier yield.

6.5 Slow Movers (DSLS)

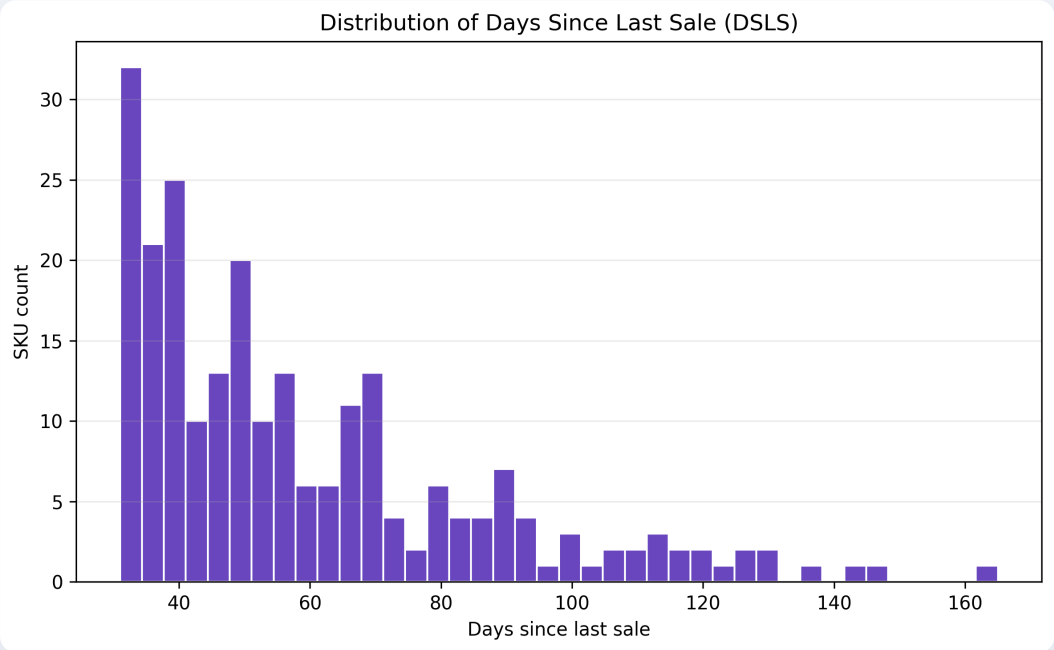

Figure 6.5 — DSLS distribution with long-tail risk.

O — Observation

DSLS risk group includes **97** SKUs over 90 days and **76** over 120 days since last sale, signaling aging inventory exposure.

R — Rationale

Demand decay and assortment drift drive DSLS accumulation; lack of timed markdowns and substitution guidance prolongs shelf inactivity.

I — Implication

Extended DSLS increases carrying costs and raises write-down probability, especially in perishables and niche packaged goods.

R — Recommendation

Deploy markdown ladders at 45/90/120-day gates, bundle slow movers with A/B-tier SKUs, and refresh assortment to remove non-performing long-tail items.

6.6 Price Variance (Top 20)

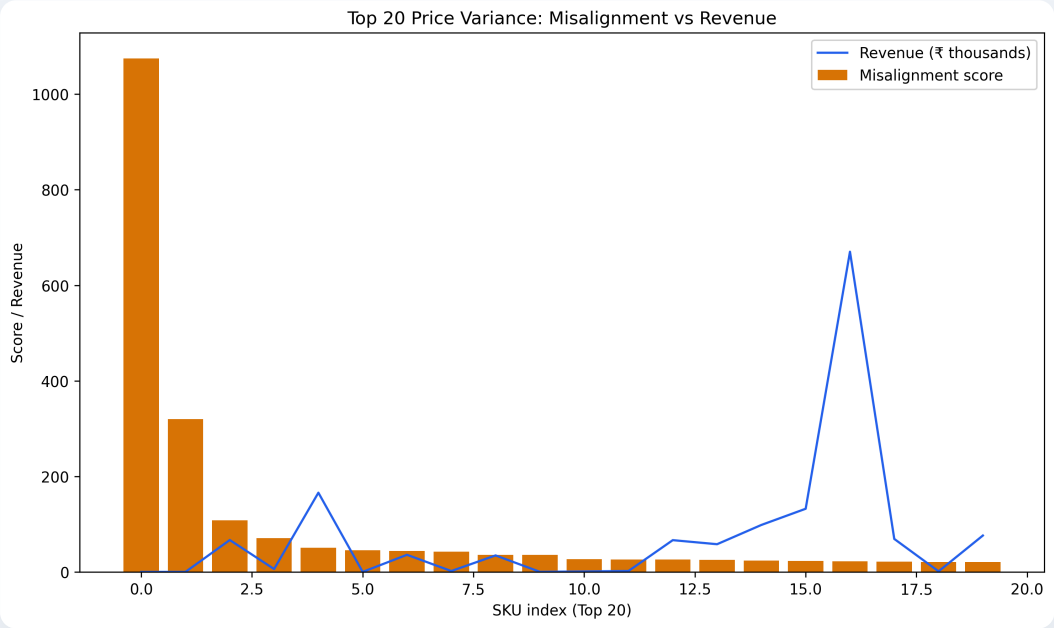

Figure 6.6 — Misalignment scores vs revenue for top 20 SKUs.

O — Observation

Top-20 price variance group drives ₹ 1490145.73 revenue with mean price CV of 36.6% (based on available CV statistics), exposing pricing governance gaps.

R — Rationale

Price bands drift due to ad-hoc discounting, supplier changes, and channel leakage, amplifying CV and customer perception volatility.

I — Implication

High variance erodes margin consistency and undermines loyalty; misalignment translates into measurable revenue exposure as captured in score aggregation.

R — Recommendation

Institute control charts for price governance, enforce SKU-level price corridors, and audit promotions to maintain CV <5% for sensitive SKUs.

Traceability: Metrics computed via scripts/section6_extraction.py using project CSVs. Generated: 2025-11-08 04:44.