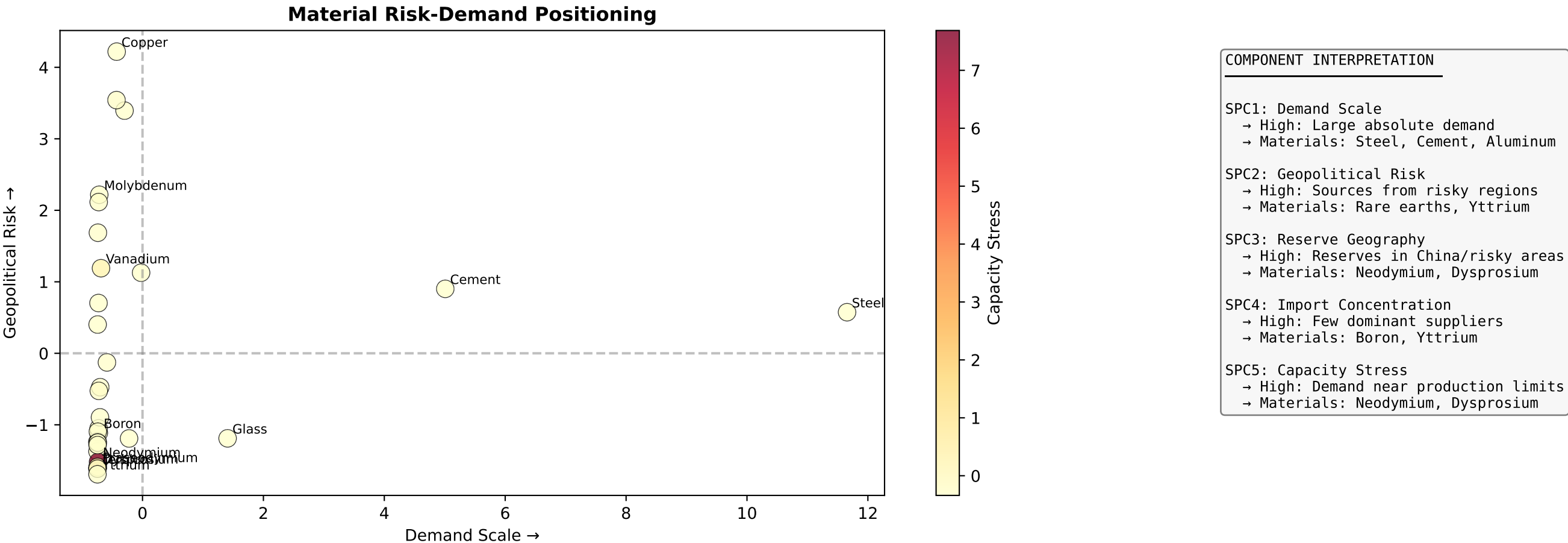


Material Supply Chain Risk Analysis — Sparse PCA Summary



Highest Scoring Materials by Component

- Demand Scale:** Steel, Cement, Glass
- Geopolitical Risk:** Copper, Zinc, Lead
- Reserve Geography:** Terbium, Dysprosium, Praseodymium
- Import Concentration:** Yttrium, Boron, Manganese
- Capacity Stress:** Neodymium, Vanadium, Praseodymium

Materials with Highest Supply Chain Risk Exposure

