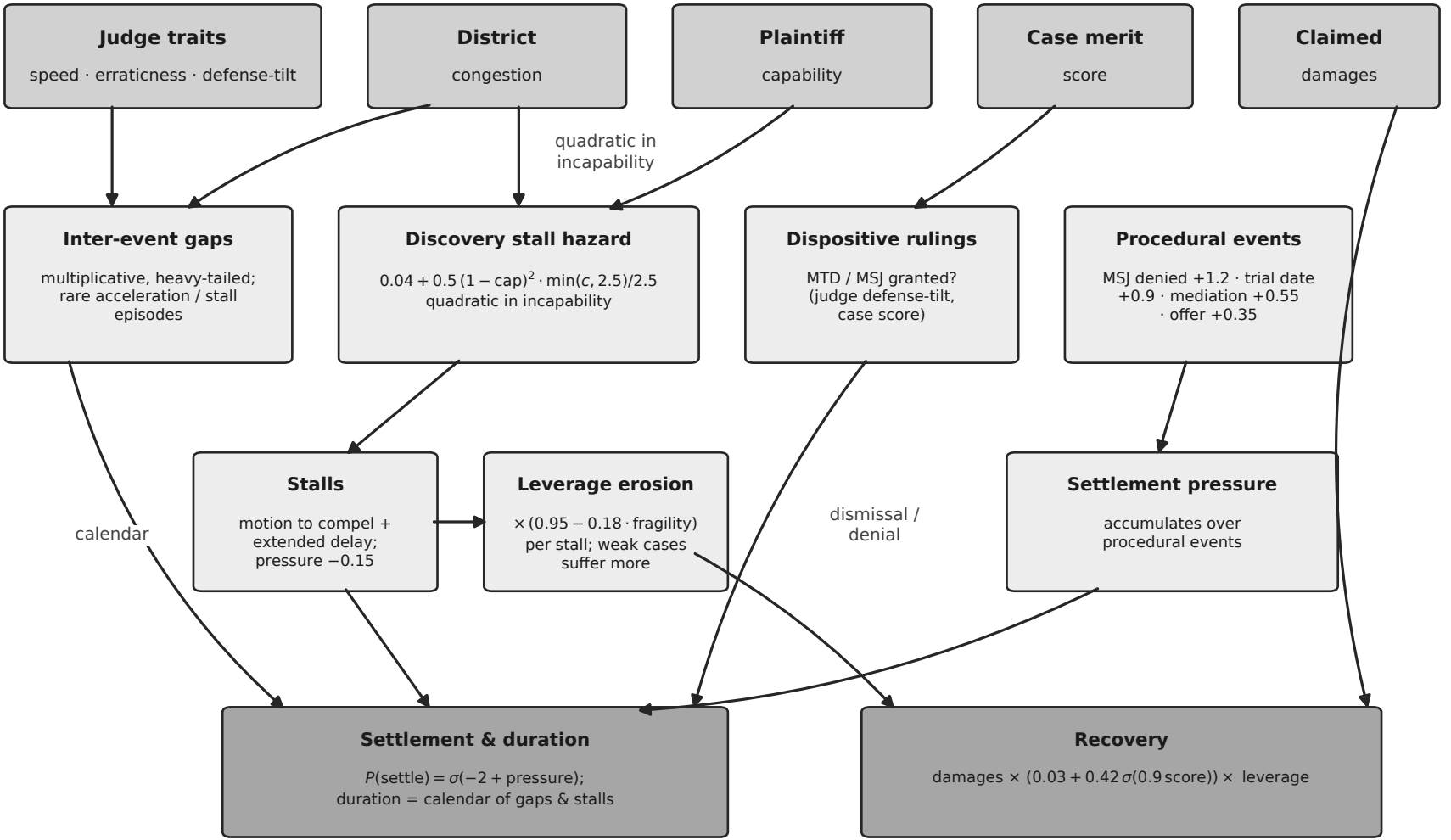
Generator v1: planted causal mechanisms (synthetic litigation world)
Judge traits
speed · erraticness · defense-tilt
District
congestion
Plaintiff
capability
Case merit
score
Claimed
damages
quadratic in incapability
Inter-event gaps
multiplicative, heavy-tailed; rare acceleration / stall episodes
Discovery stall hazard
$0.04 + 0.5\,(1 - \text{cap})^2 \cdot \min(c, 2.5)/2.5$
quadratic in incapability
Dispositive rulings
MTD / MSJ granted? (judge defense-tilt, case score)
Procedural events
MSJ denied +1.2 · trial date +0.9 · mediation +0.55 · offer +0.35
Stalls
motion to compel + extended delay; pressure −0.15
Leverage erosion
$\times\,(0.95 - 0.18 \cdot \text{fragility})$ per stall; weak cases suffer more
Settlement pressure
accumulates over procedural events
calendar
dismissal / denial
Settlement & duration
$P(\text{settle}) = \sigma(-2 + \text{pressure})$;
duration = calendar of gaps & stalls
Recovery
damages $\times\,(0.03 + 0.42\,\sigma(0.9\,\text{score}))\,\times$ leverage