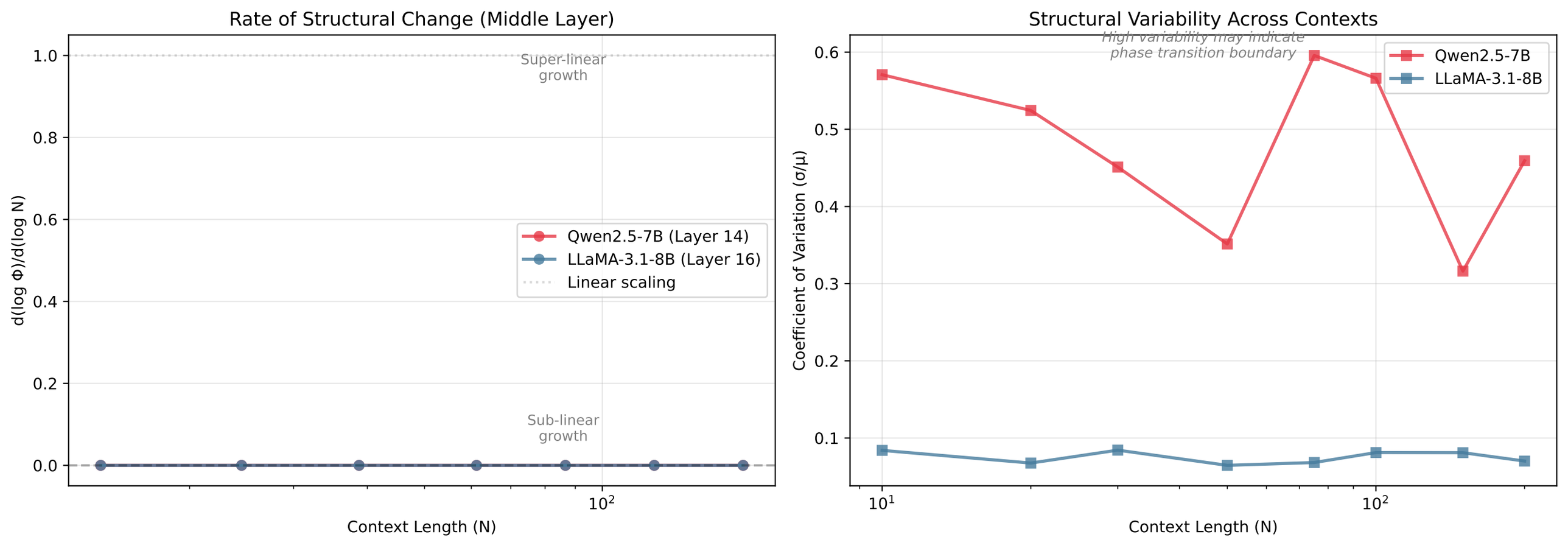
Rate of Structural Change (Middle Layer)
d(log Φ)/d(log N)
1.0
0.8
0.6
0.4
0.2
0.0
Super-linear growth
Sub-linear growth
Qwen2.5-7B (Layer 14)
LLaMA-3.1-8B (Layer 16)
Linear scaling
10^2
Context Length (N)
Structural Variability Across Contexts
High variability may indicate phase transition boundary
Coefficient of Variation (σ/μ)
0.6
0.5
0.4
0.3
0.2
0.1
Qwen2.5-7B
LLaMA-3.1-8B
10^1
10^2
Context Length (N)