One-Hot Violation Rate by Scenario

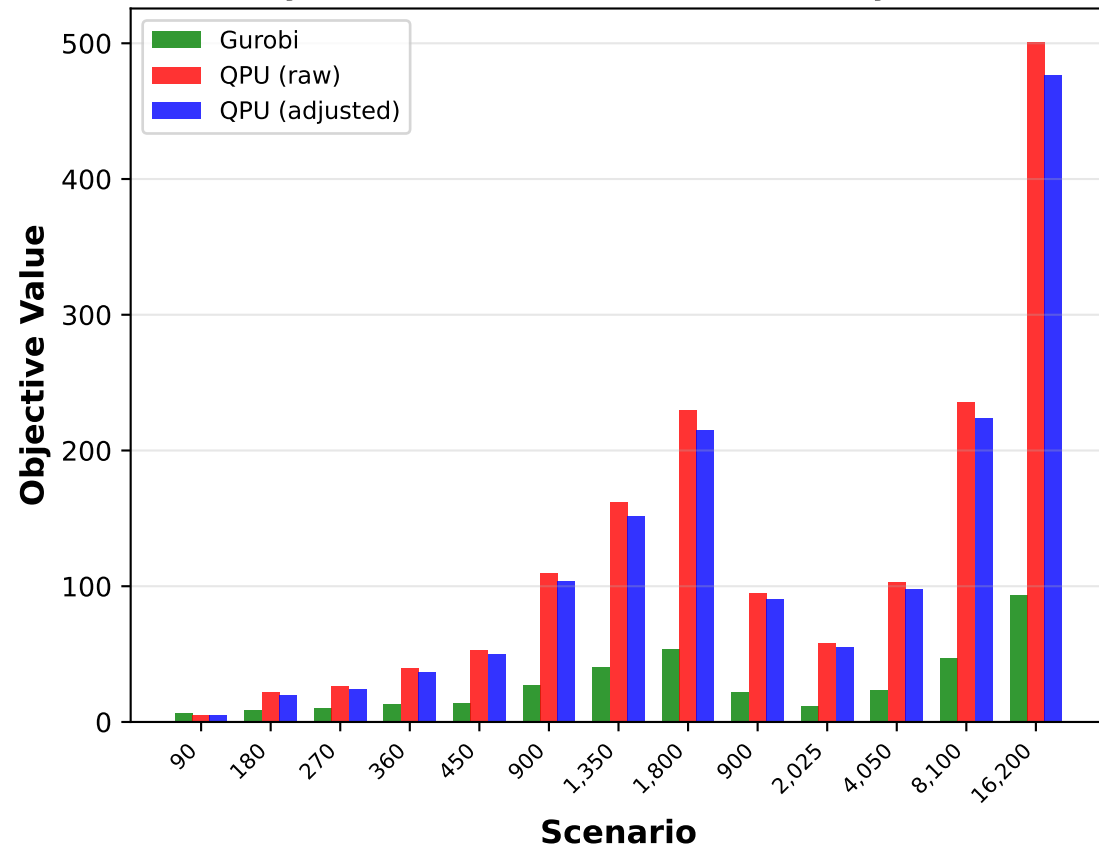Avg: 21.9%
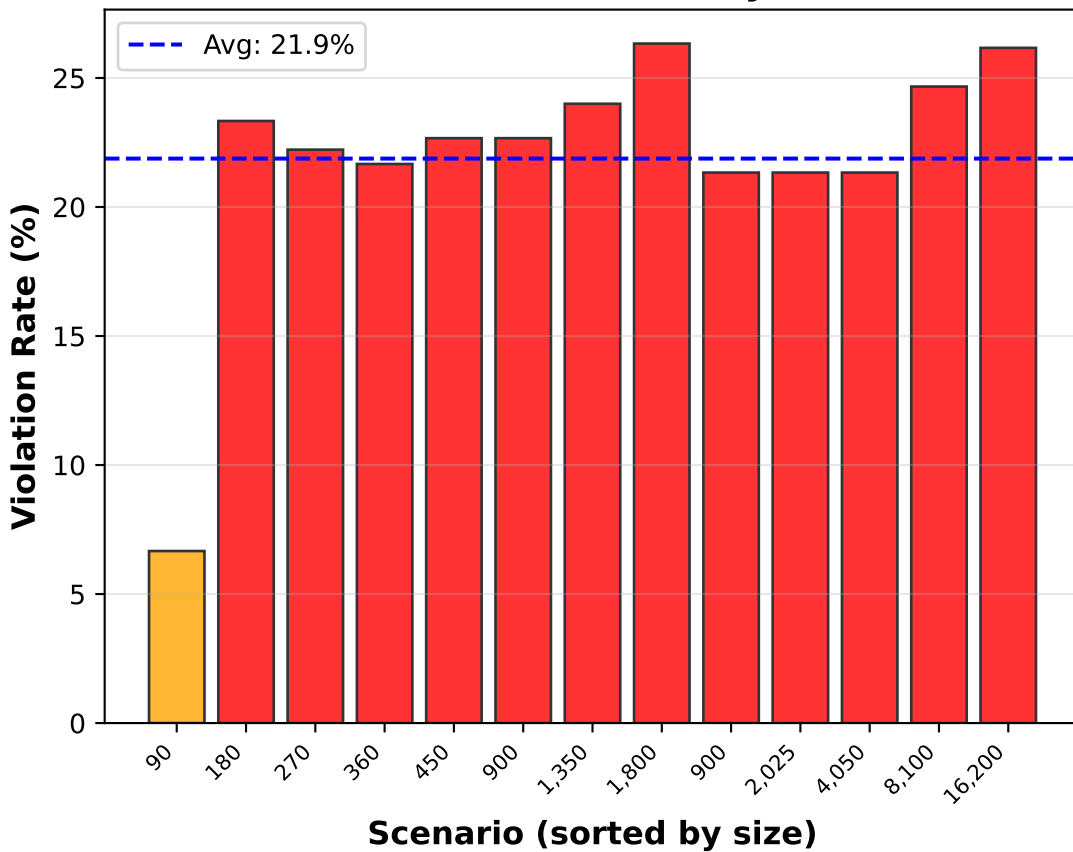
Violations Scale with Problem Size

Rate: 26.5% of slots
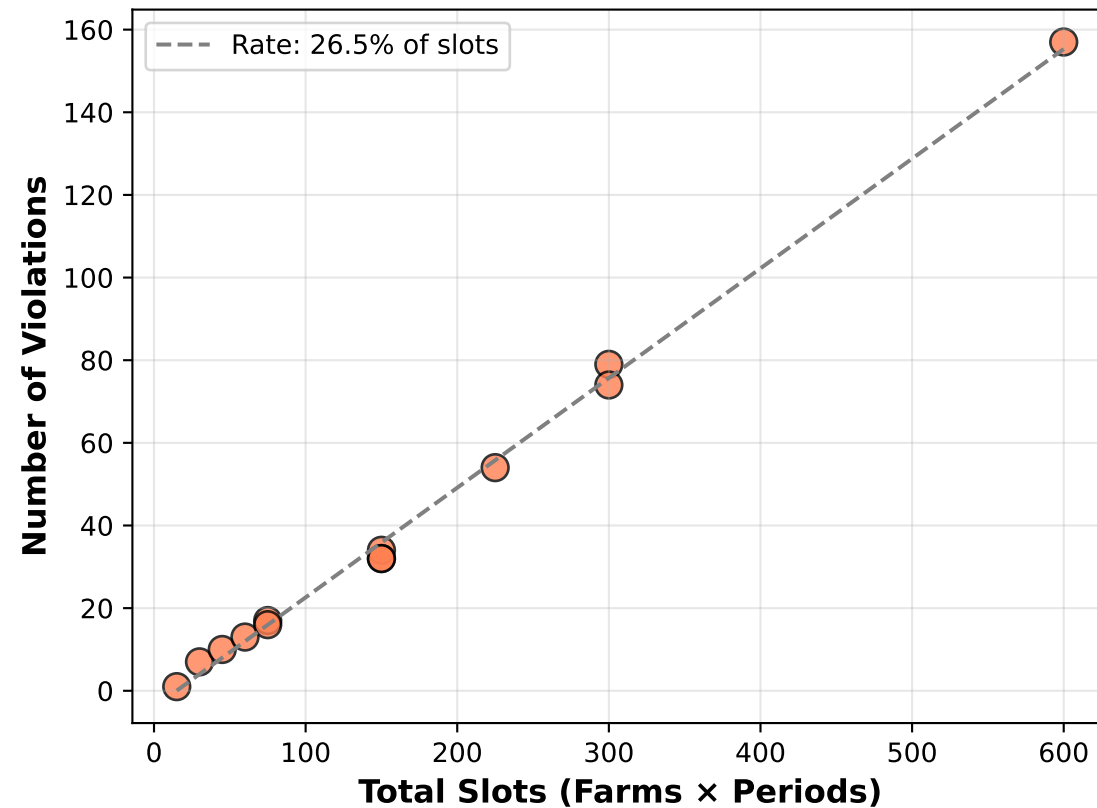
Gap vs Estimated Violation Impact

- Total Gap
- Est. Violation Impact
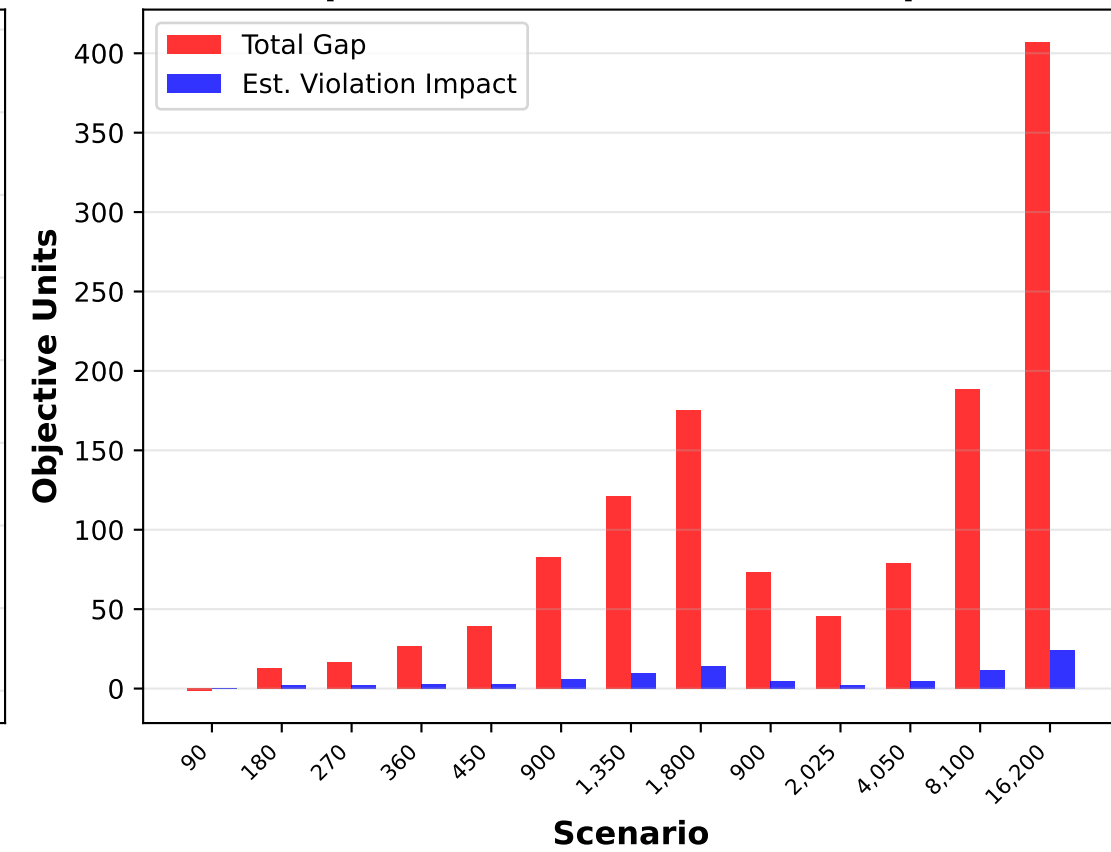
Objective: Raw vs Violation-Adjusted

- Gurobi
- QPU (raw)
- QPU (adjusted)

Objective Ratio: Before vs After Adjustment

- Raw QPU/Gurobi
- Adjusted QPU/Gurobi
- Parity (1.0)
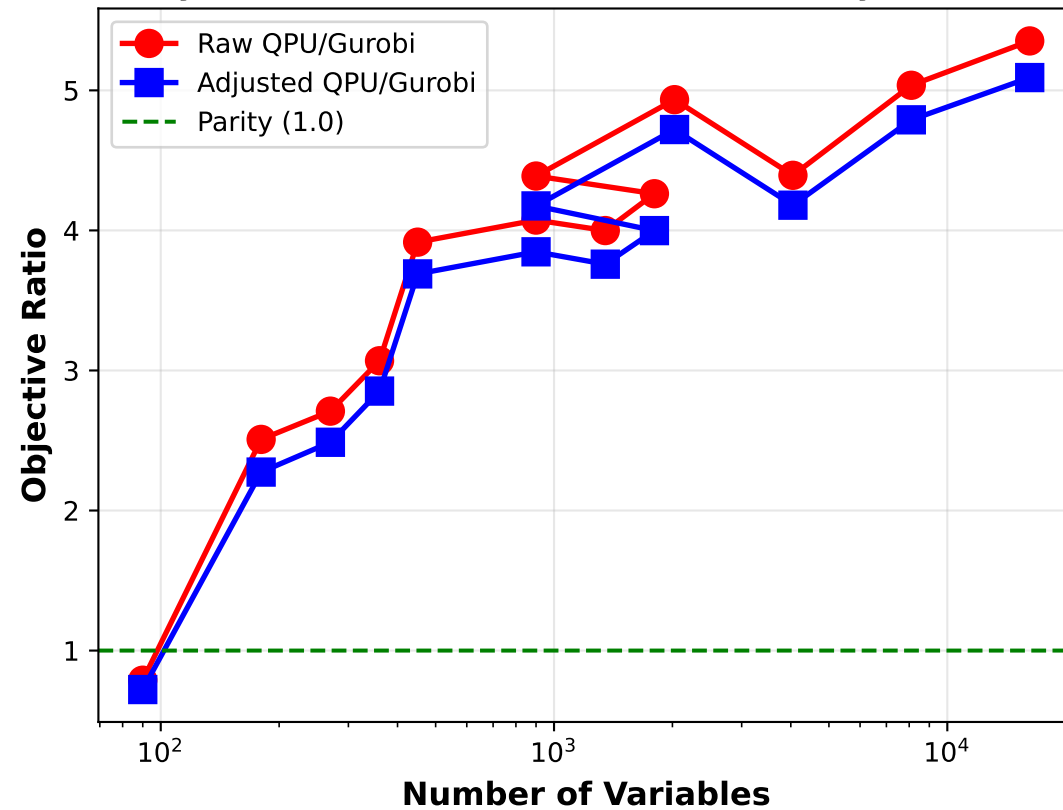
VIOLATION IMPACT SUMMARY

Total scenarios: 13
Total farm-period slots: 2,175
Total one-hot violations: 526

Overall violation rate: 24.18%
Violation rate range: 6.7% - 26.3%

Gap Analysis:
    Total raw gap: 1267.0
    Gap per violation: 2.41
    Correlation (viols vs gap): 0.9970

After Adjustment:
    Avg raw ratio (QPU/Gurobi): 3.80x
    Avg adjusted ratio: 3.58x
    Gap explained by violations: 7.0%

INTERPRETATION:
Violations account for 7% of the
objective gap. The remaining gap may be due to:
- Decomposition approximation errors
- Boundary effects between clusters
- Stochastic sampling variance