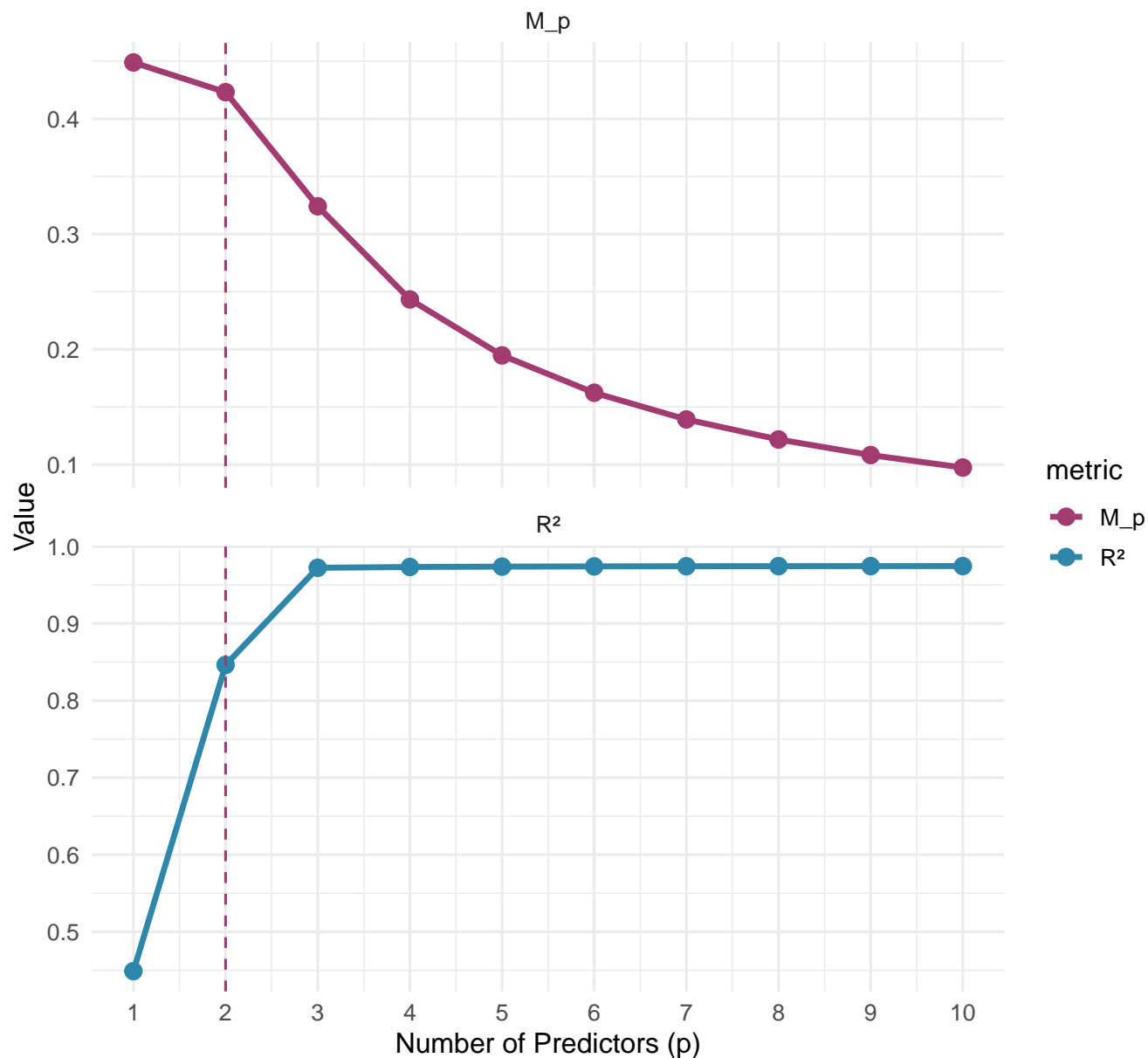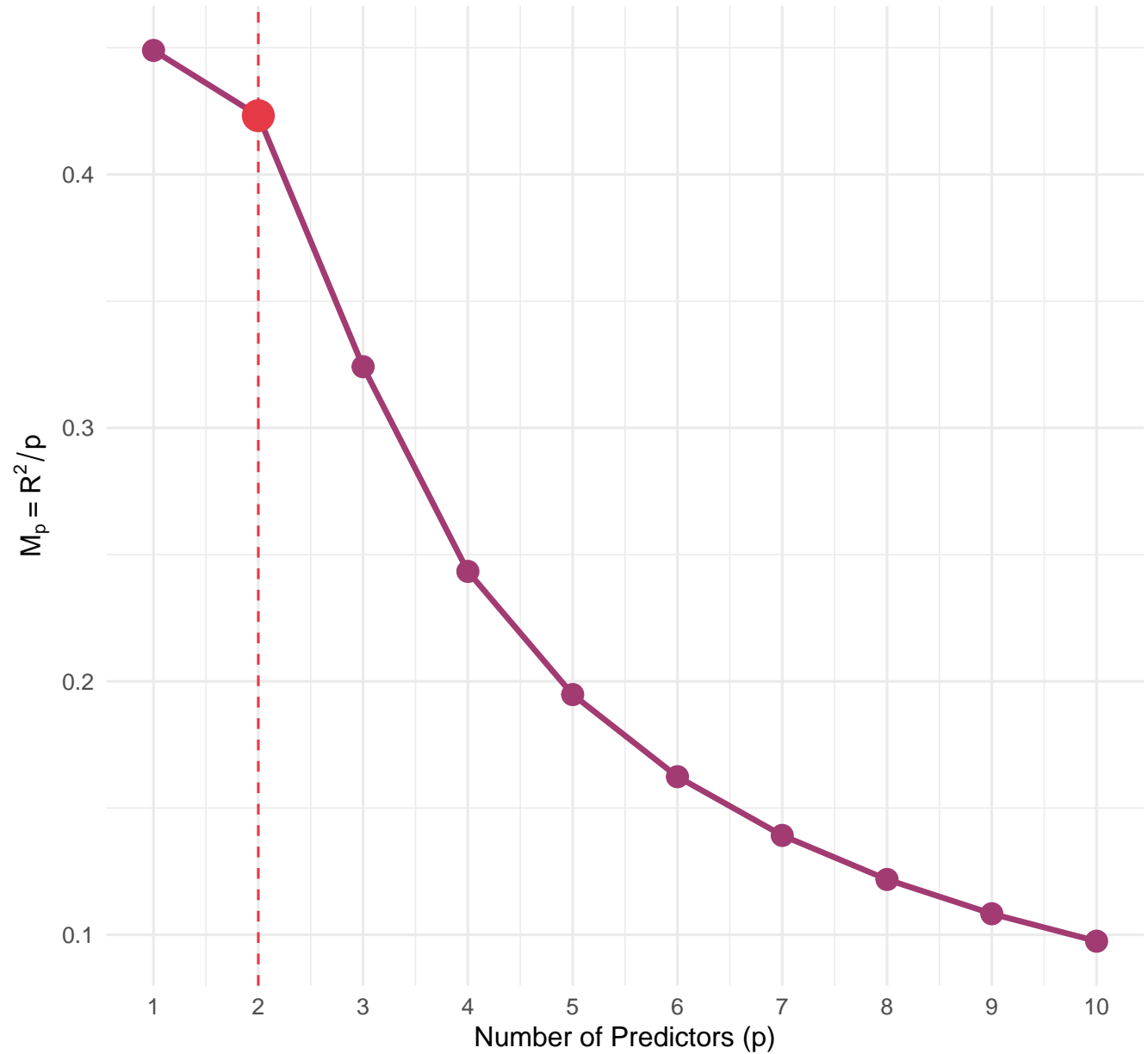Model Selection: R² and M_p vs Model Complexity
Optimal complexity: p* = 2

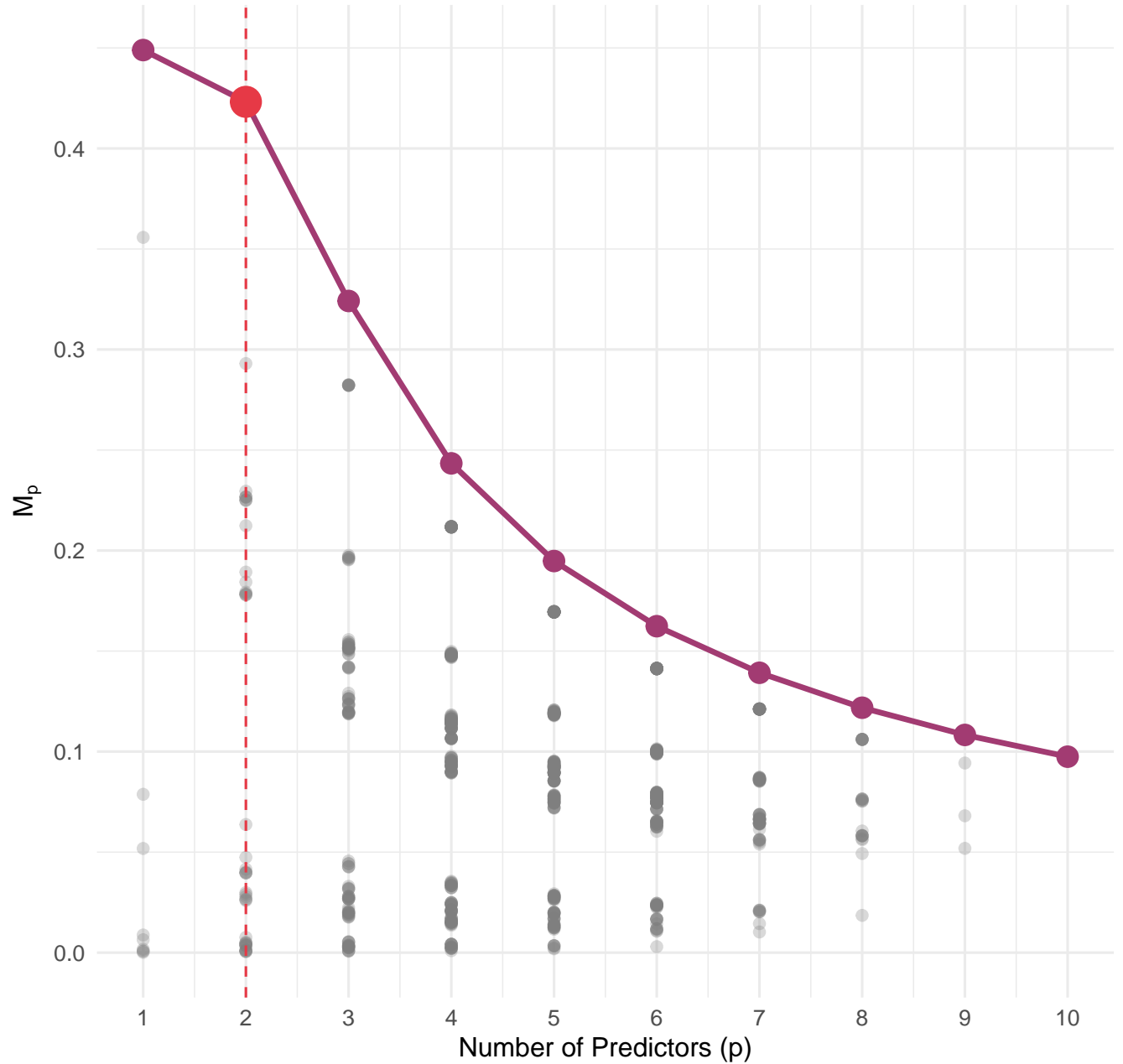M_p Efficiency Curve

Explained variance per parameter vs. model complexity

$M_p = R^2/p$ (y-axis)

Number of Predictors (p) (x-axis)

M_p Values for All Possible Models

Model Selection Criteria Comparison
Optimal: M_p –> p=2, AIC –> p=4, BIC –> p=3