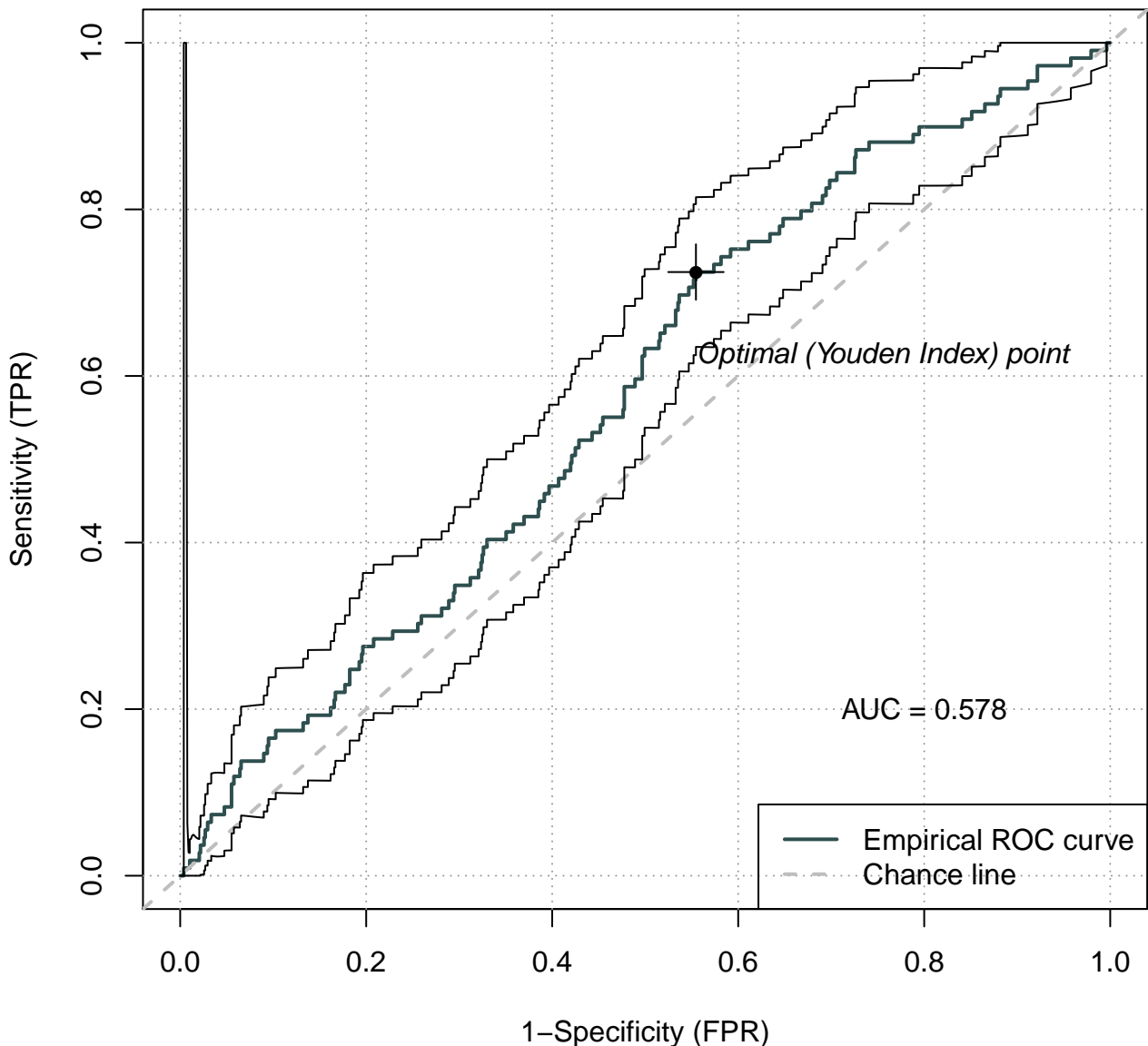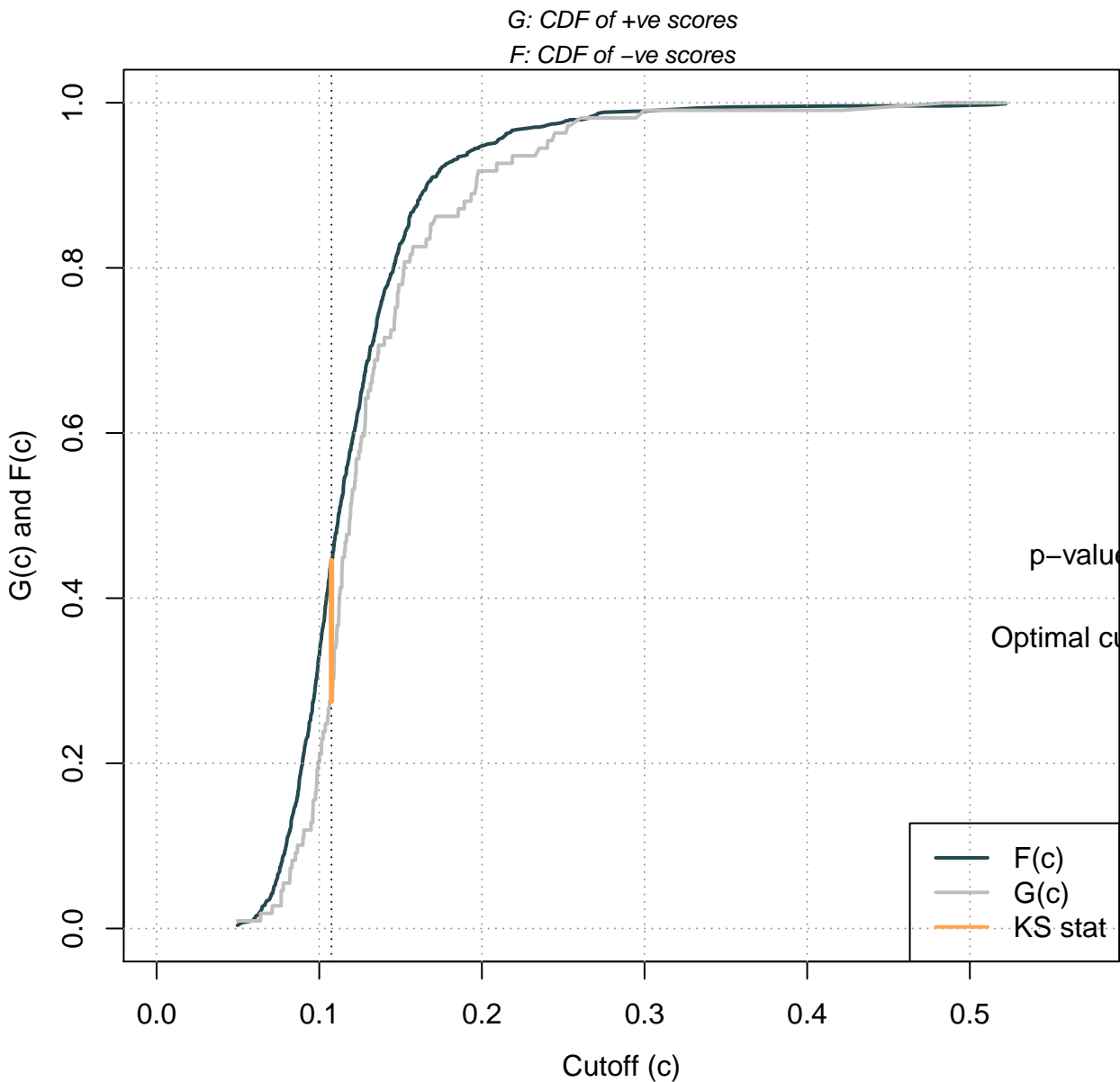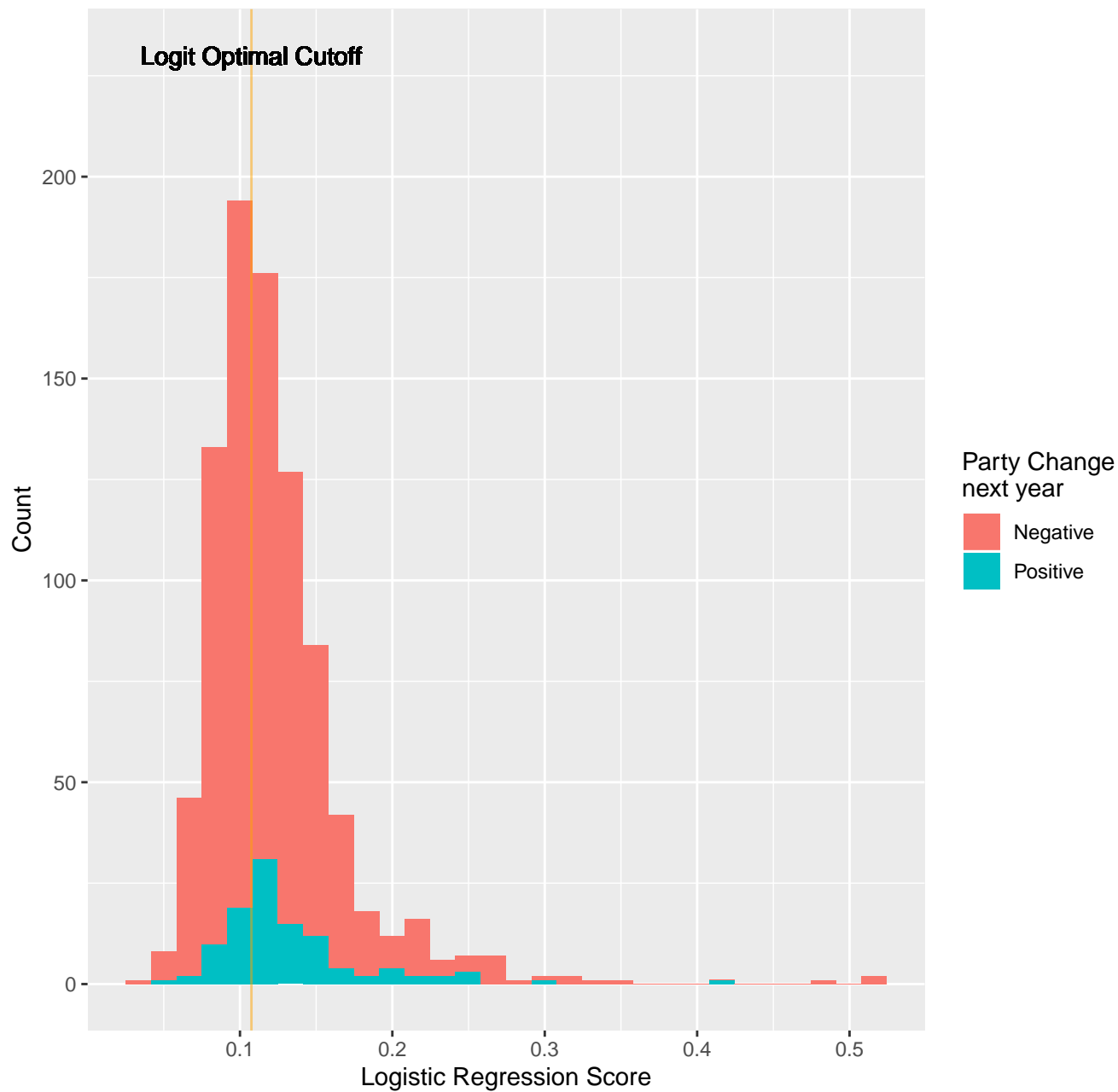**Logistic Regression ROC on Model: Party Change next year ~
Participation % + Unemployment % + GDP % Change + Moving Avg Diffs**

Optimal (Youden Index) point

AUC = 0.578

Empirical ROC curve
Chance line

Sensitivity (TPR)

1−Specificity (FPR)

G: CDF of +ve scores
F: CDF of −ve scores

p−valu(

Optimal cu
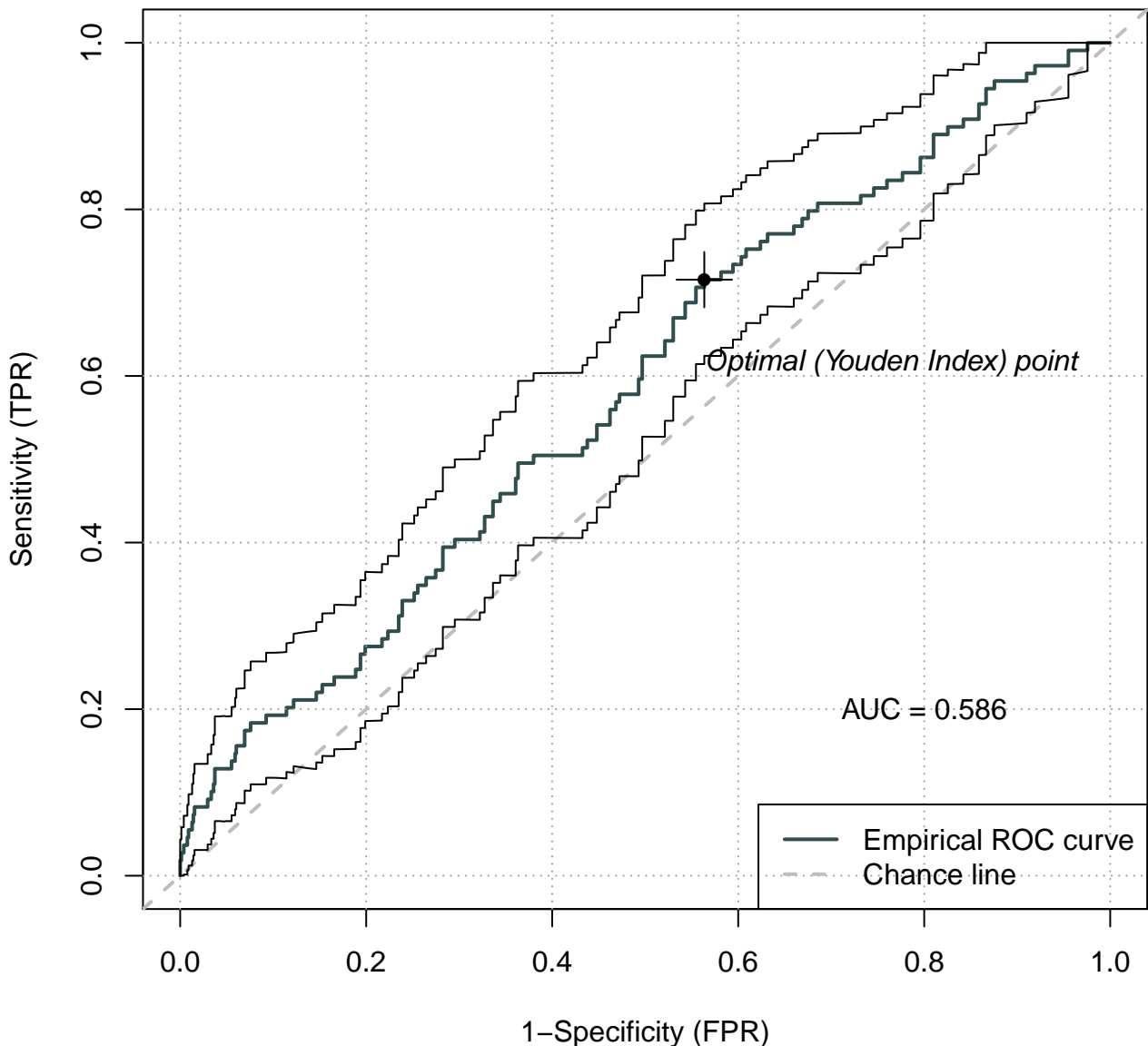
F(c)
G(c)
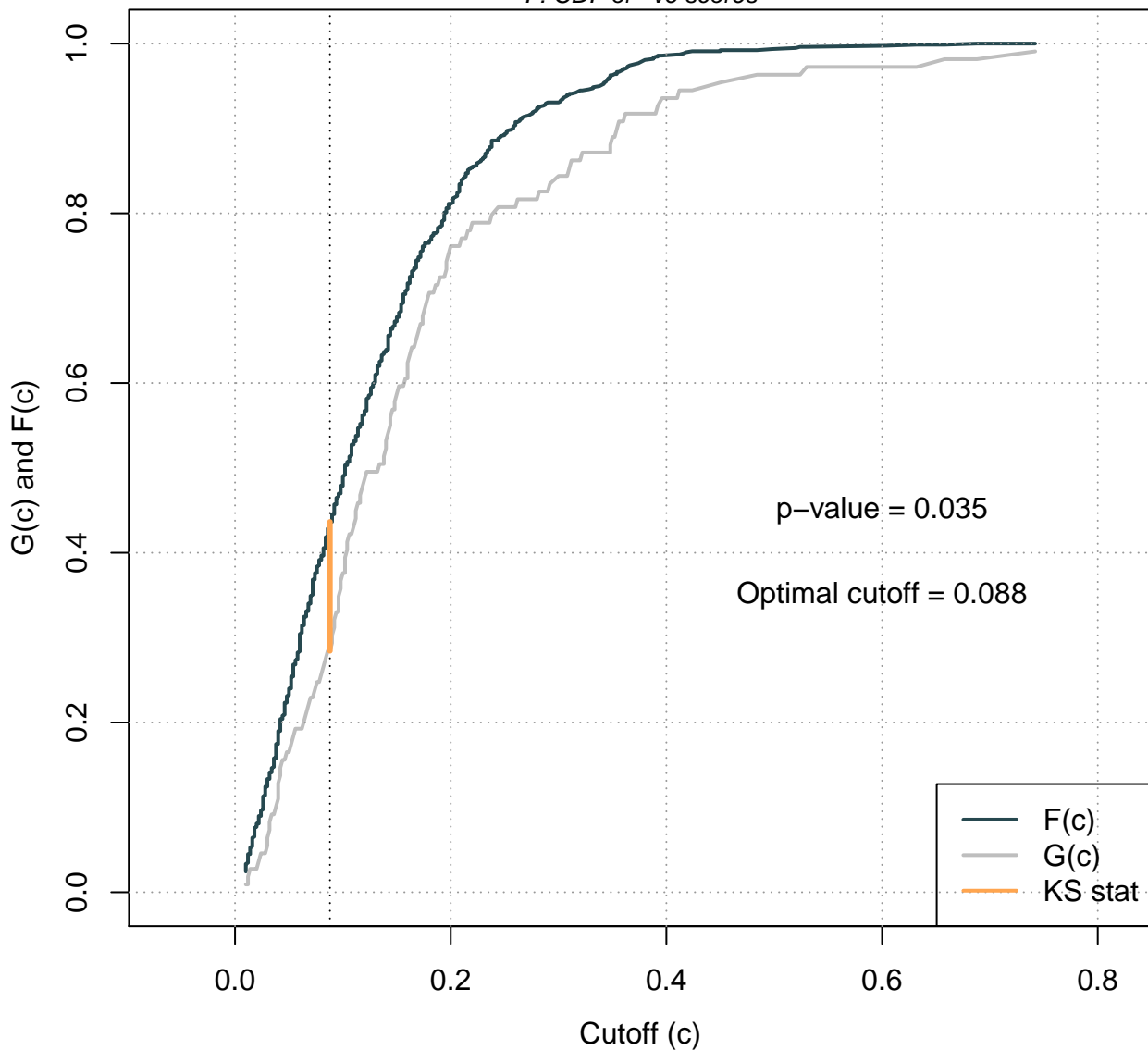KS stat

G(c) and F(c)

Cutoff (c)

Logistic Regression Scores by +/− Distributions

Random Forest ROC on Model: Party Change Next Year ~ Participation% + Unemployment% + GDP %Change + Moving Avg Diffs

Optimal (Youden Index) point

AUC = 0.586

Empirical ROC curve
Chance line

Sensitivity (TPR)

1−Specificity (FPR)

G: CDF of +ve scores
F: CDF of −ve scores

p−value = 0.035

Optimal cutoff = 0.088

F(c)
G(c)
KS stat

G(c) and F(c)

Cutoff (c)

Random Forest Score by +/− Distributions