

Input parameters (black lines)

input joint distr

model

BayesianMS poisson chainlength

bias

0.5

nChains

5000

betavar

1

meanChainlen

13

X1	Y	X2	p
1	1	1	0.21875
1	1	0	0.1875
1	0	1	0.03125
1	0	0	0.0625
0	1	1	0.1875
0	1	0	0.125
0	0	1	0.0625
0	0	0	0.125

causal strengths

X1	Y	X2
0	0.5	0
0	0	0
0	0.5	0

baserates 0.5 0.5 0.5

mean sim joint distr

state	X1	Y	X2	p
1	1	1	1	0.23352242
2	1	1	0	0.16746478
3	1	0	1	0.02915910
4	1	0	0	0.05989624
5	0	1	1	0.16408418
6	0	1	0	0.11948489
7	0	0	1	0.06054473
8	0	0	0	0.16584367

Input parameters (red lines)

input joint distr

model BayesianMS poisson chainlength

X1	Y	X2	p
1	1	1	0.003375
1	1	0	0.019125
1	0	1	0.019125
1	0	0	0.108375
0	1	1	0.019125
0	1	0	0.108375
0	0	1	0.108375
0	0	0	0.614125

causal strengths

X1	Y	X2
0	0	0
0	0	0
0	0	0

bias

0.5

baserates 0.15 0.15 0.15

mean sim joint distr

nChains

5000

state	X1	Y	X2	p
1	1	1	1	0.04703198
2	1	1	0	0.03625958
3	1	0	1	0.03726984
4	1	0	0	0.10513661
5	0	1	1	0.03758176
6	0	1	0	0.10140728
7	0	0	1	0.10627517
8	0	0	0	0.52903779

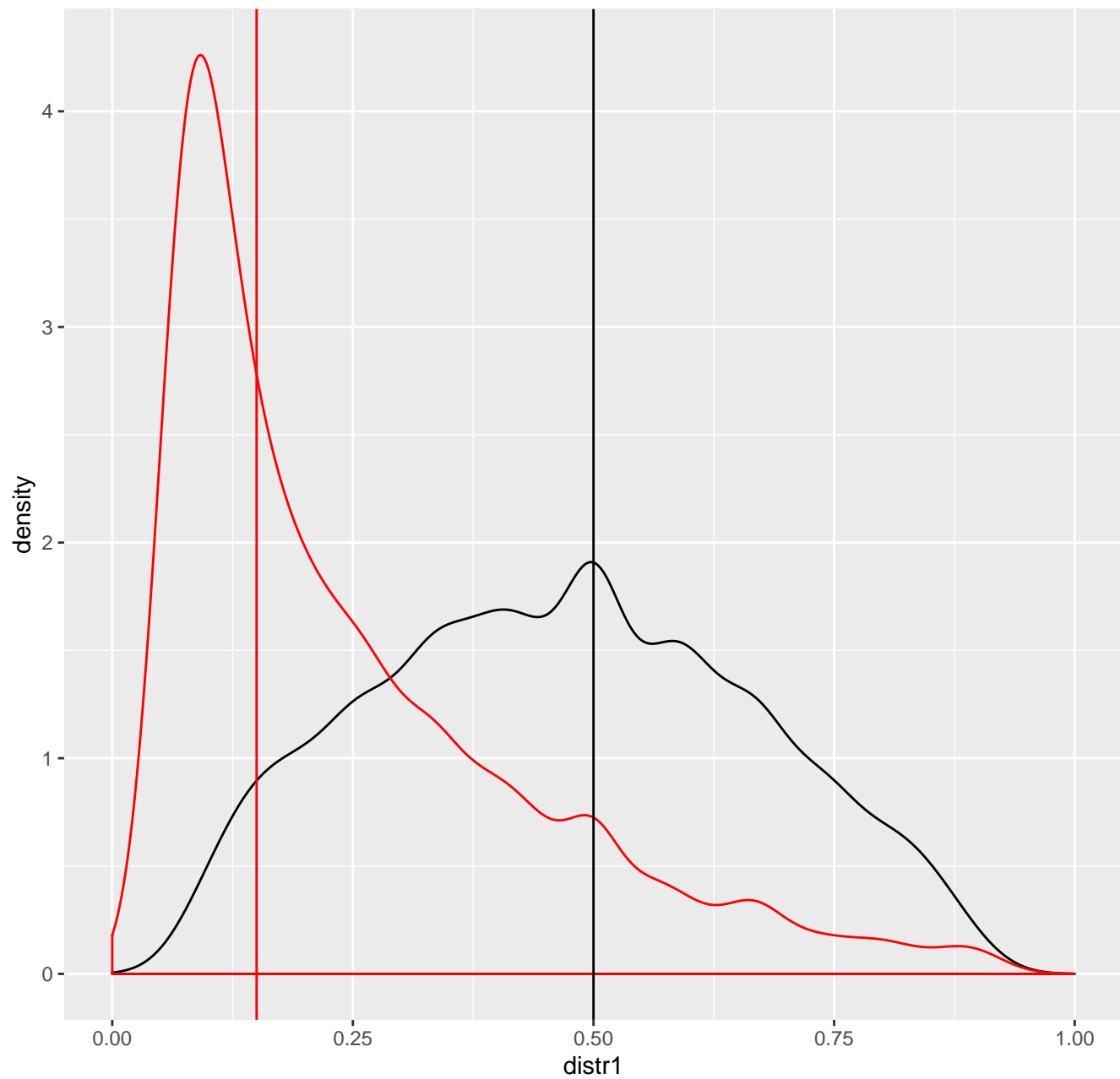
betavar

1

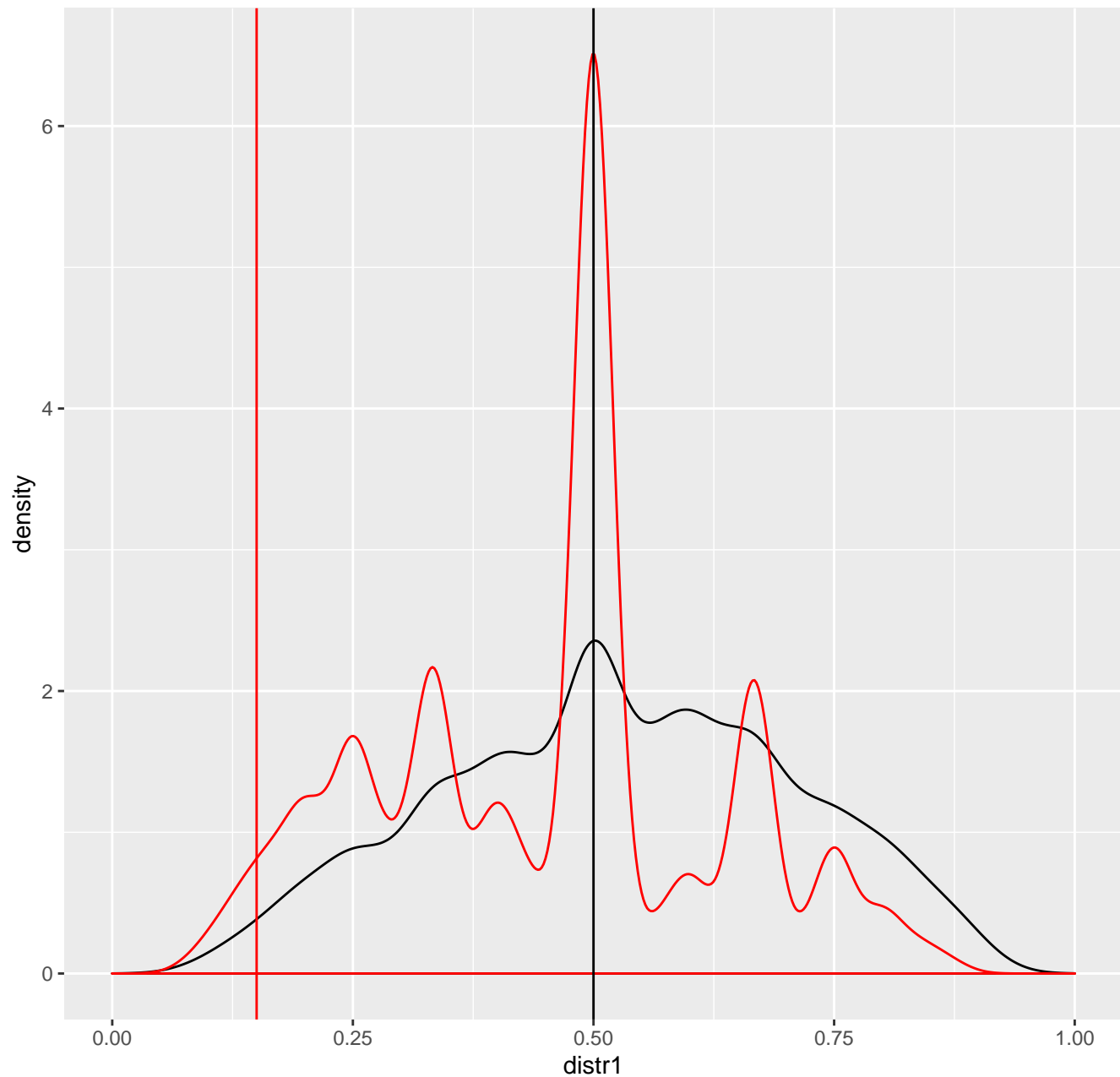
meanChainlen

13

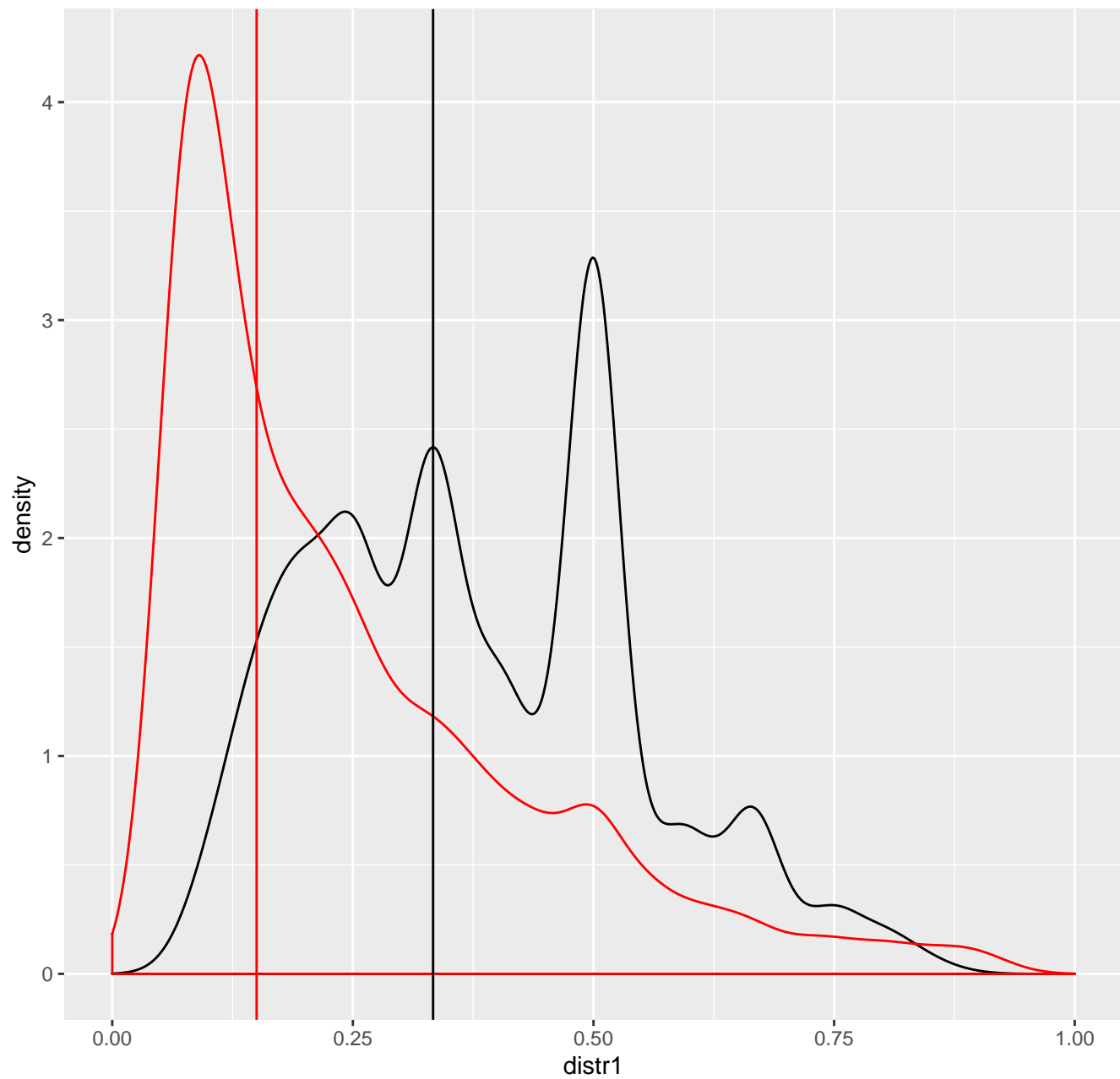
response distribution $X_1|X_2==0$



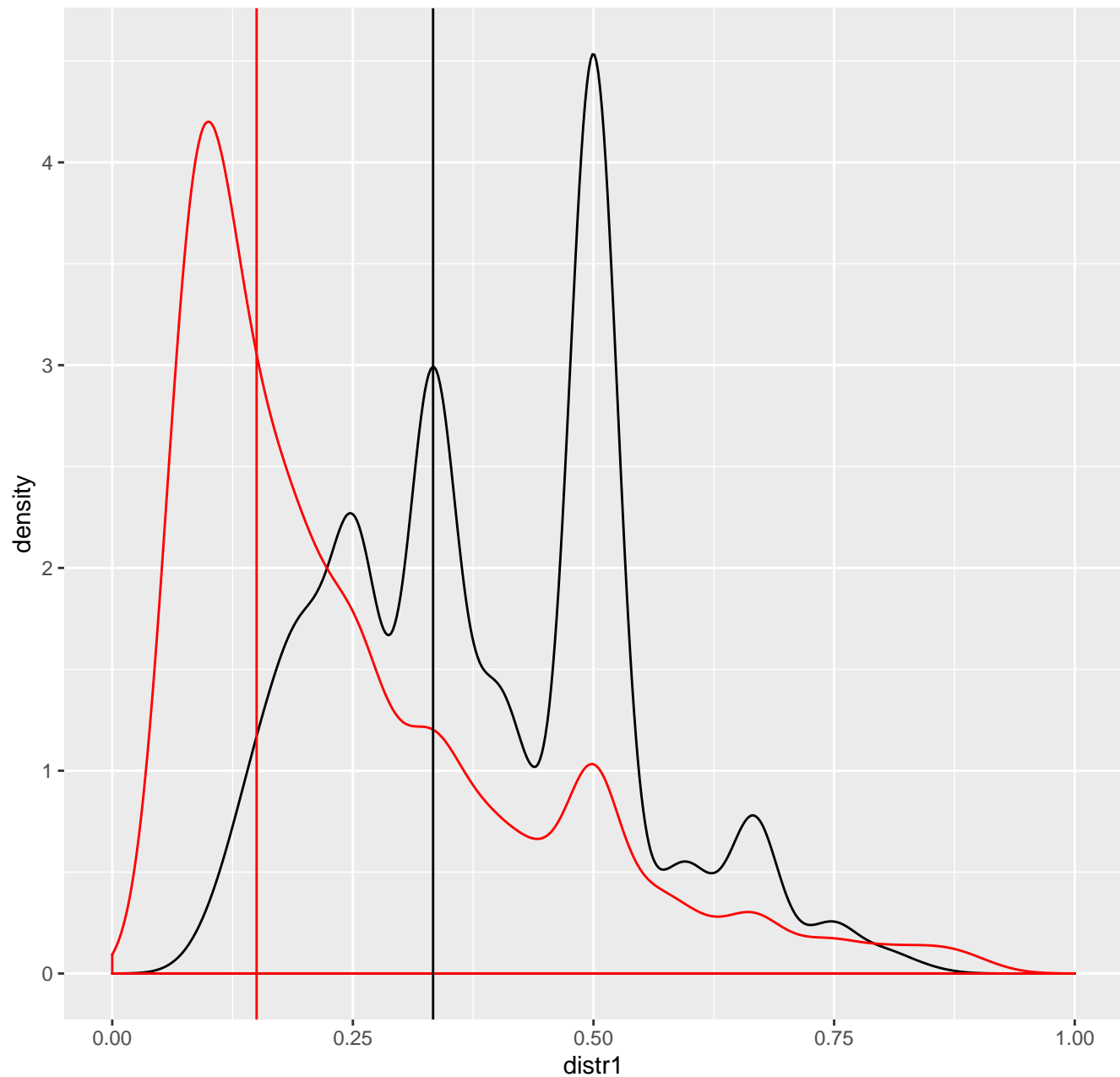
response distribution $X_1|X_2=1$



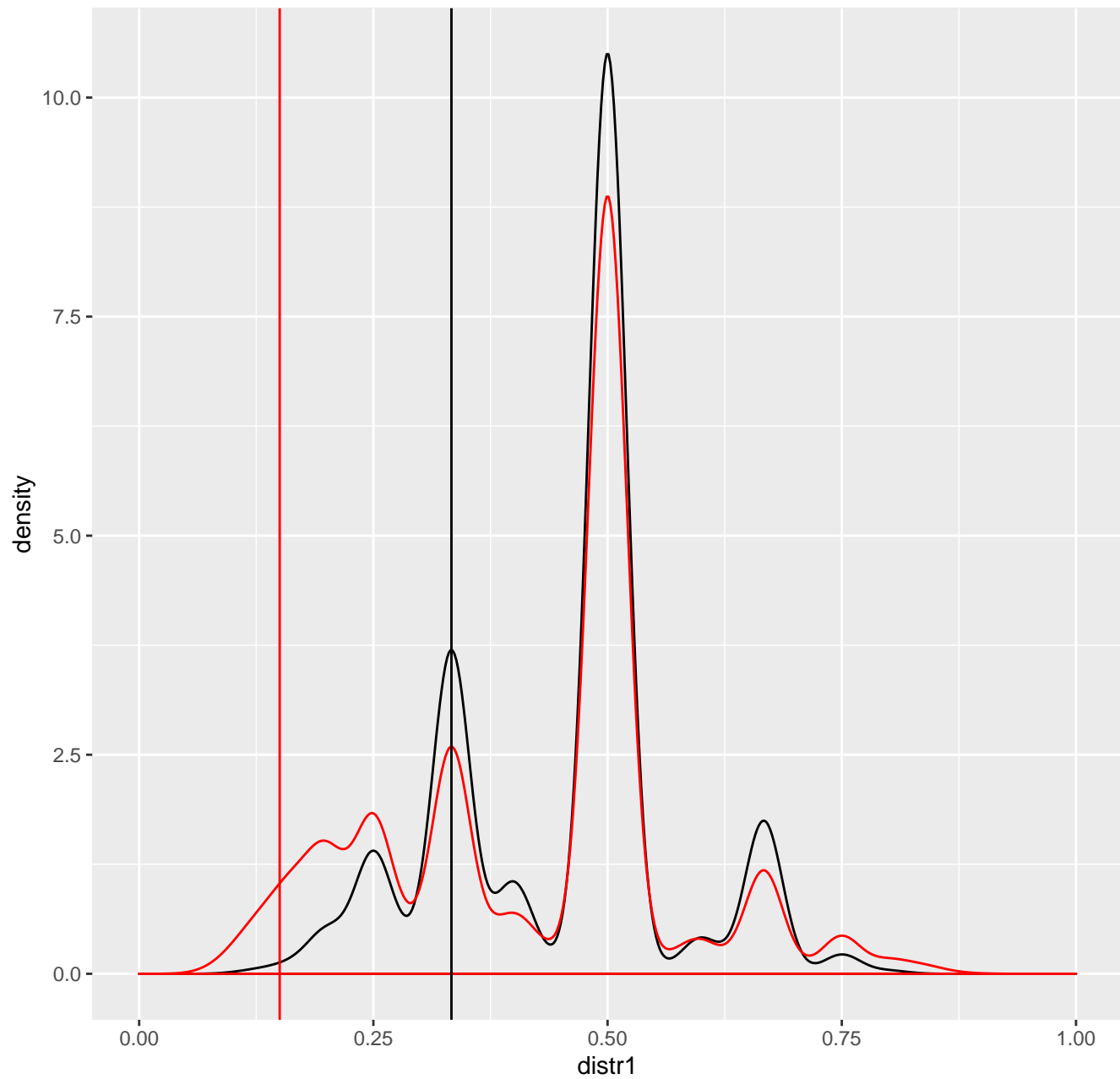
response distribution $X_1|Y==0$



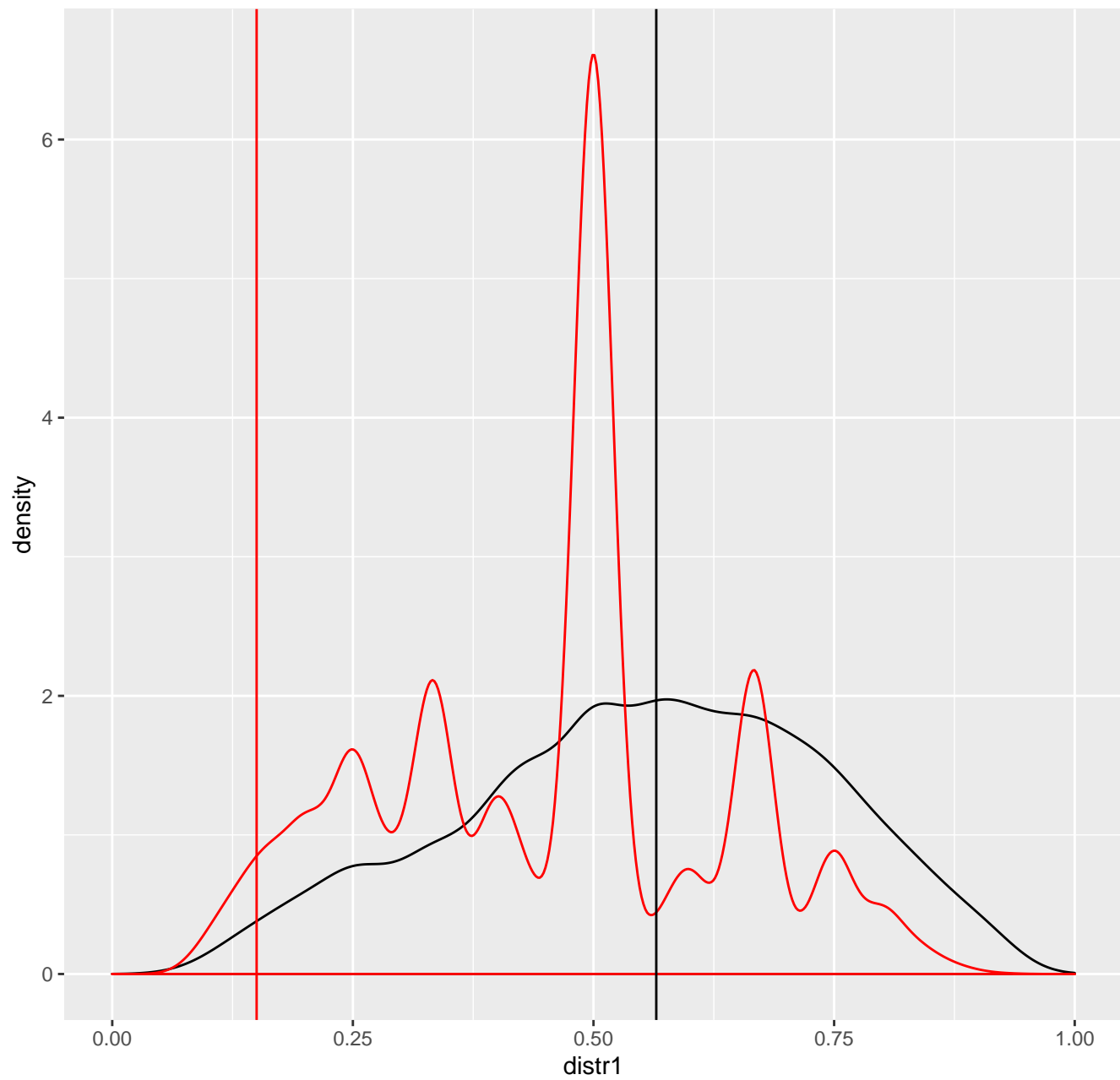
response distribution $X_1|Y==0$ & $X_2==0$



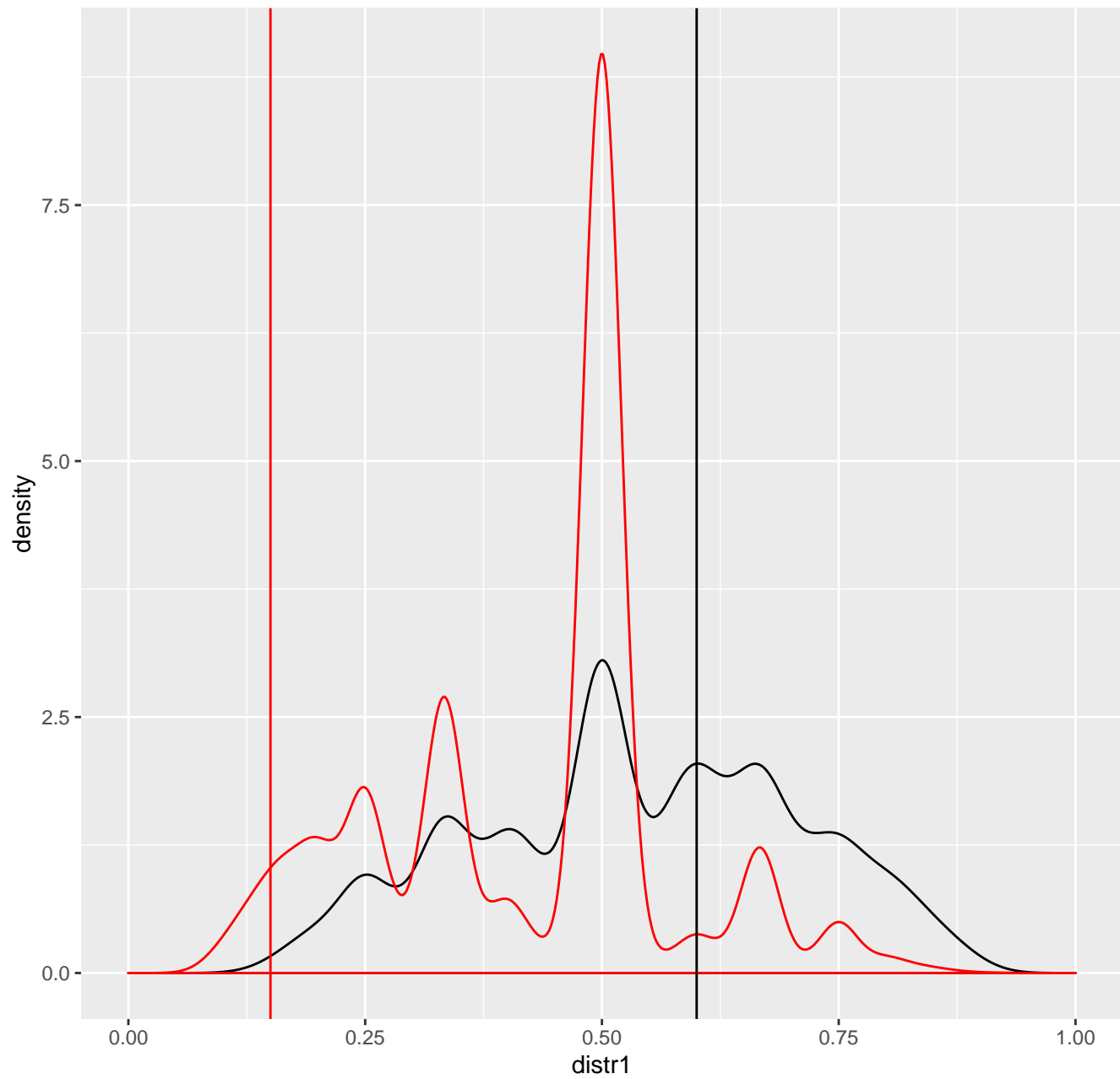
response distribution $X_1|Y==0$ & $X_2==1$



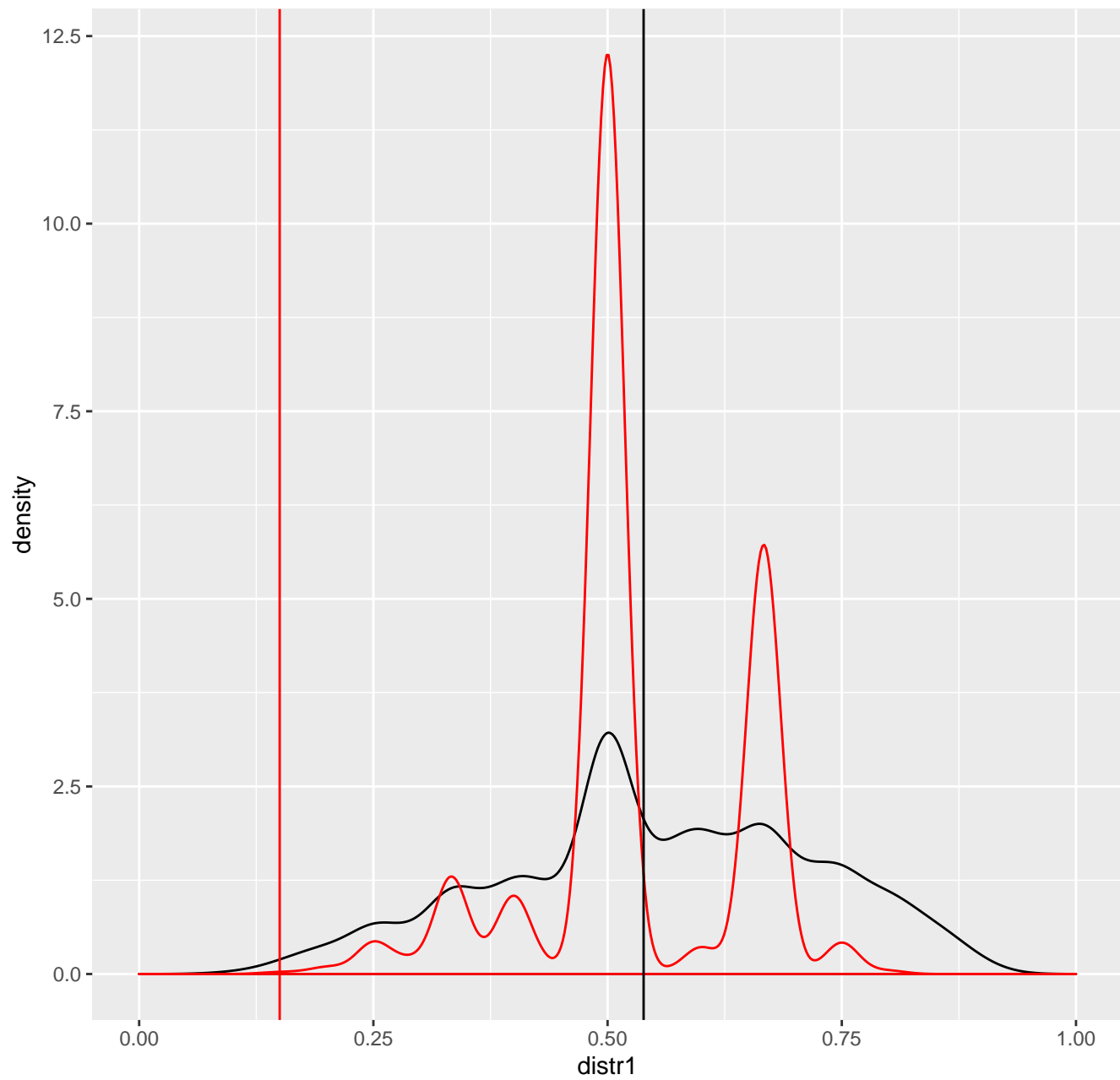
response distribution $X_1|Y=1$



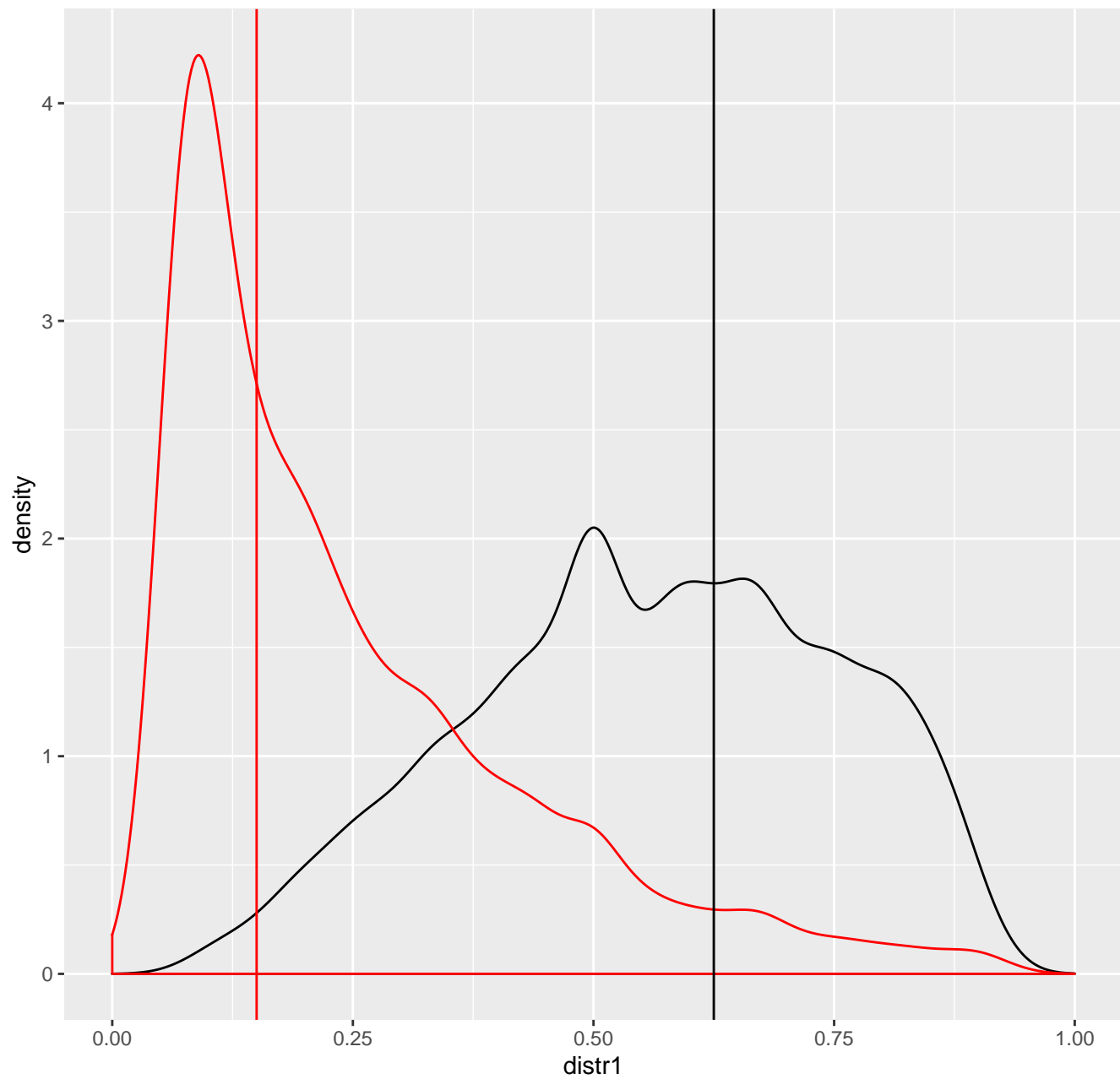
response distribution $X1|Y==1 \text{ \& } X2==0$



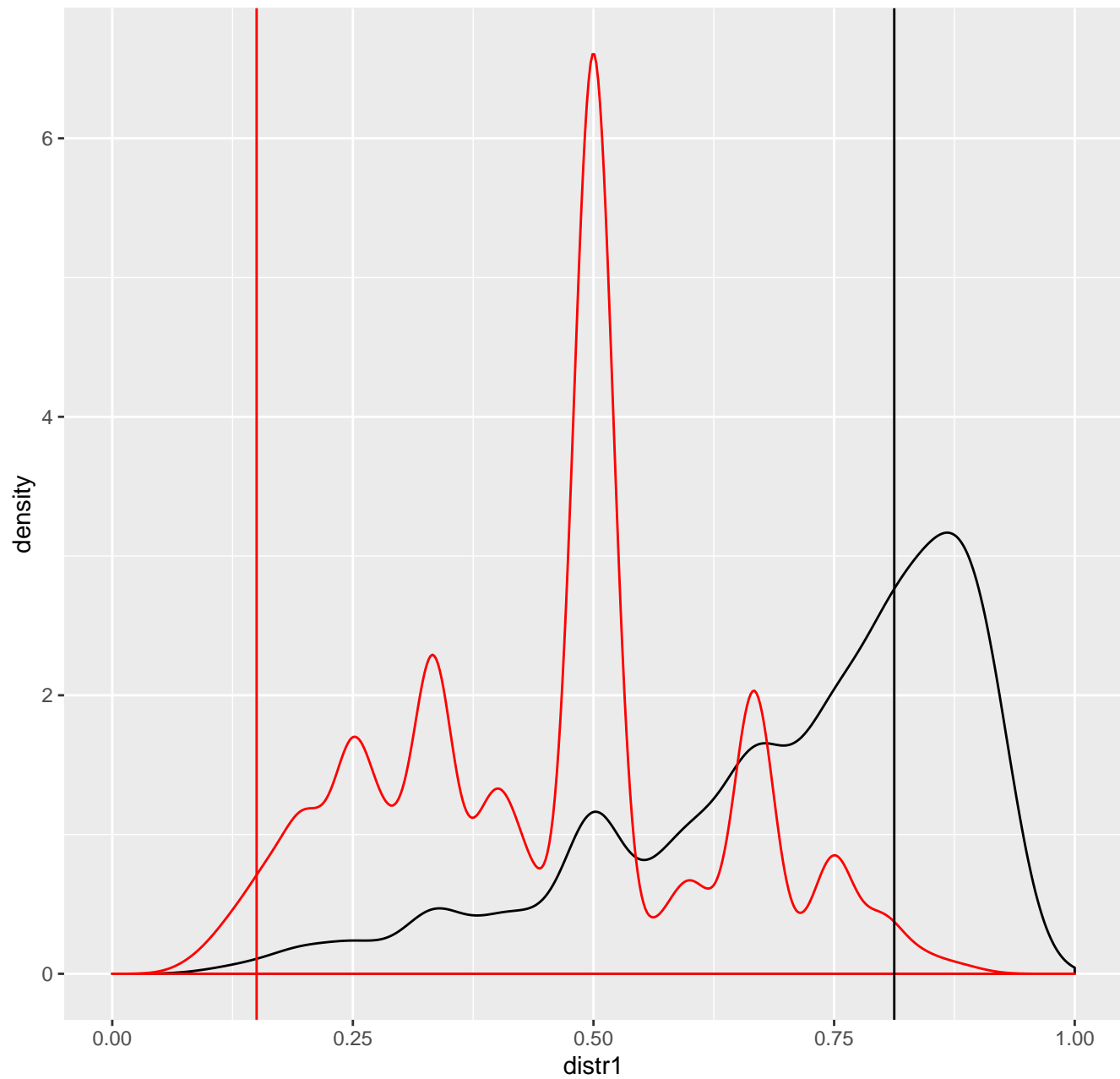
response distribution $X_1|Y==1 \text{ \& } X_2==1$



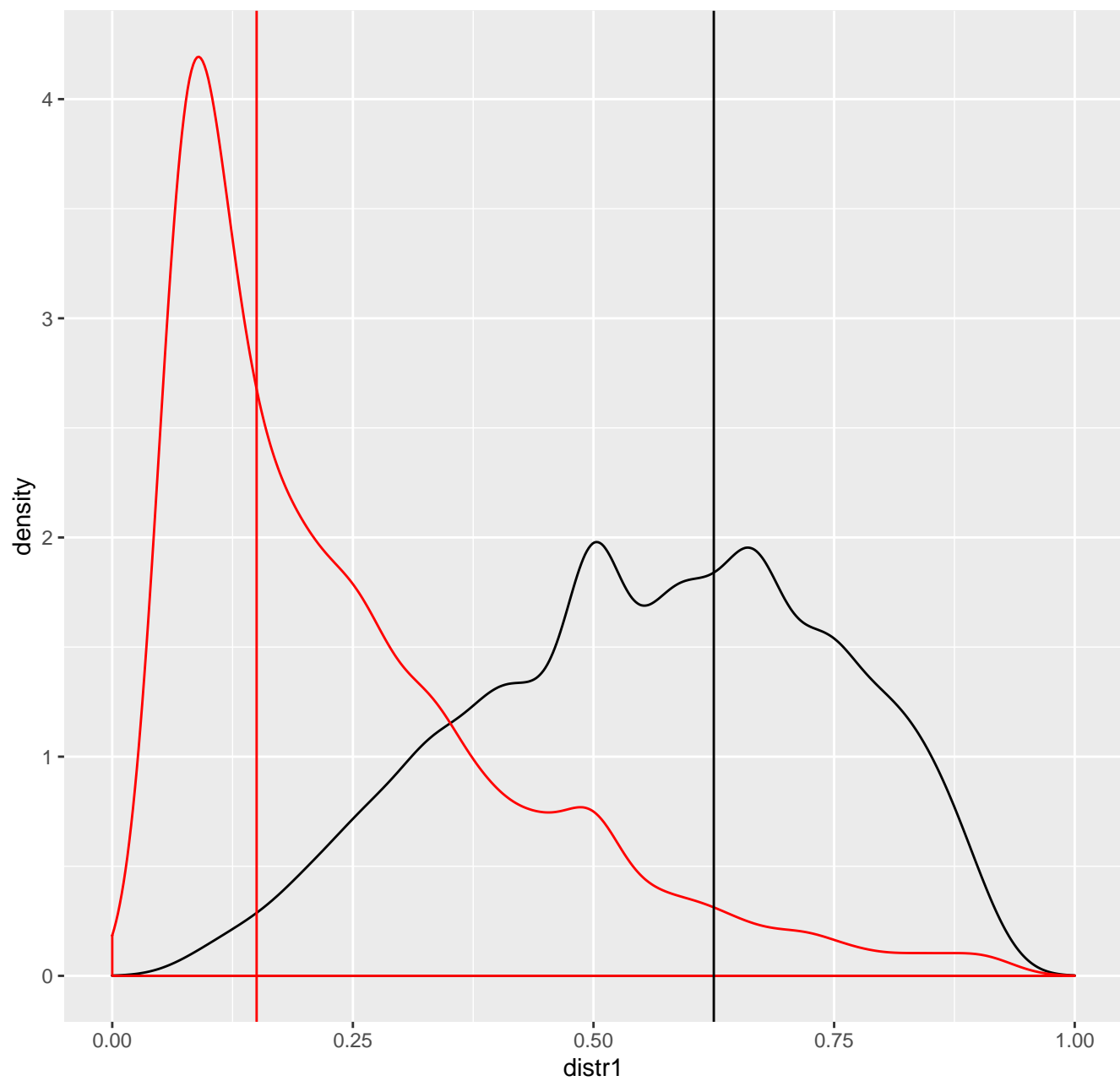
response distribution $Y|X_2==0$



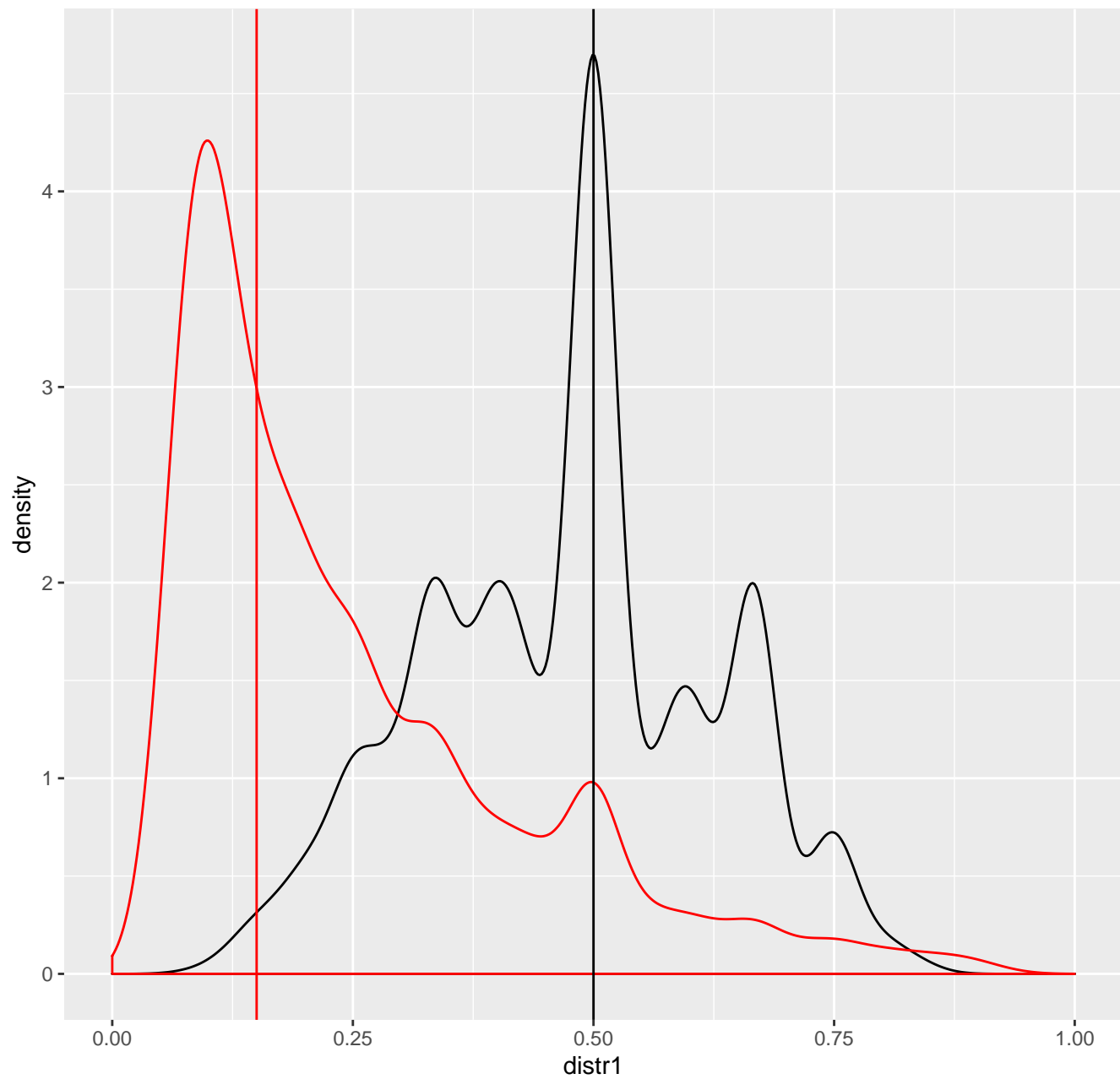
response distribution $Y|X_2==1$



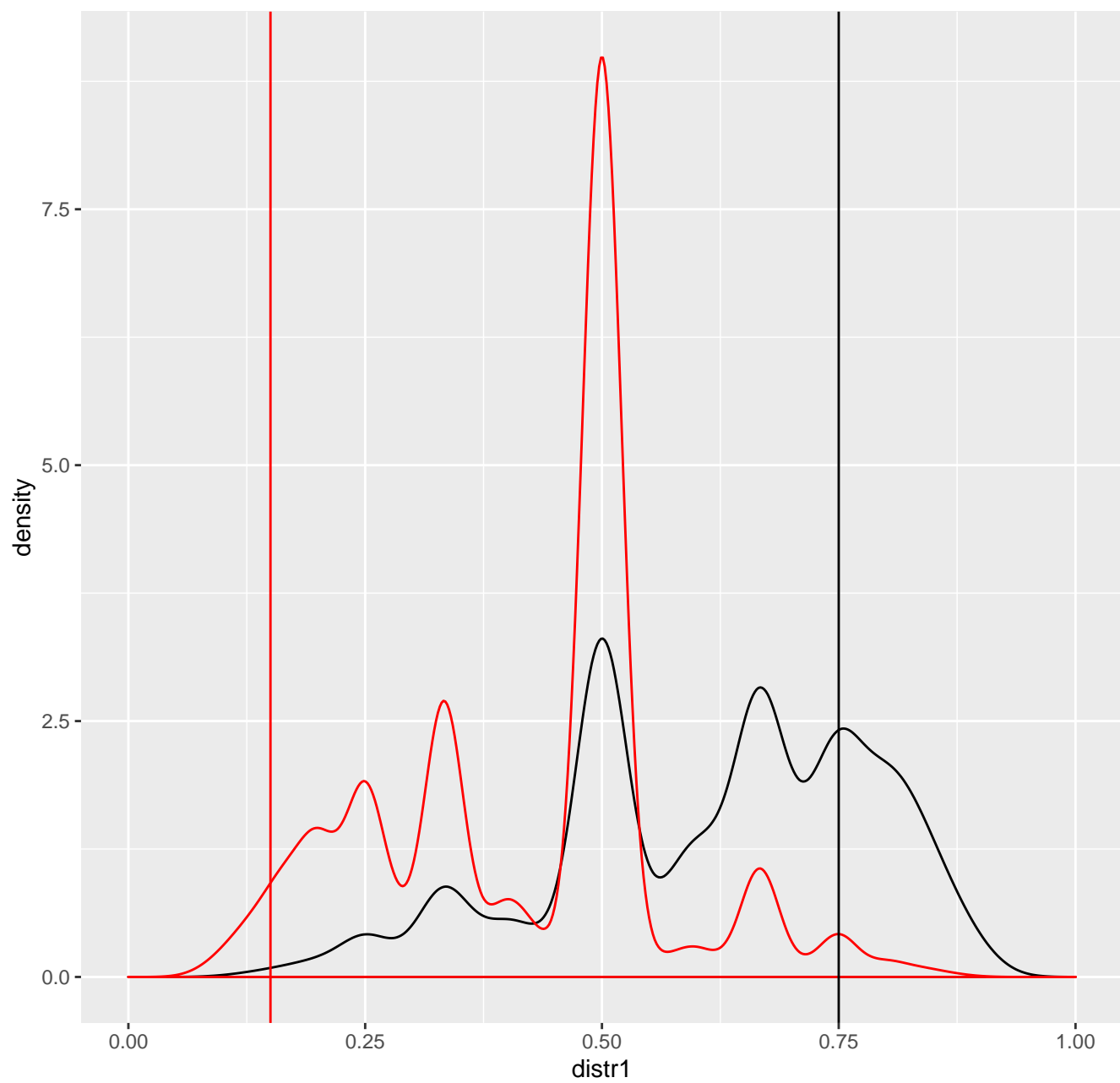
response distribution $Y|X1==0$



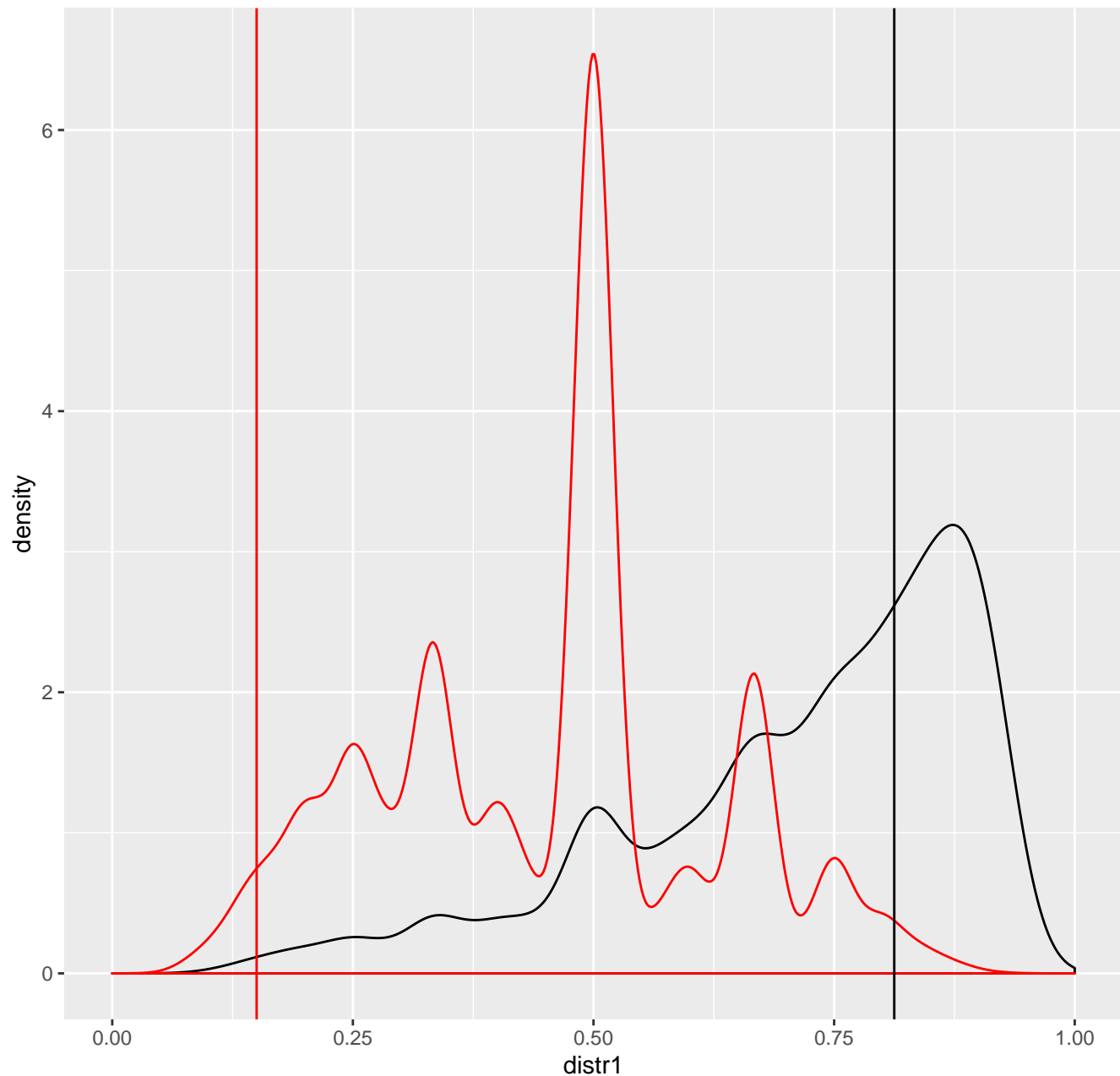
response distribution $Y|X_1==0 \text{ \& } X_2==0$



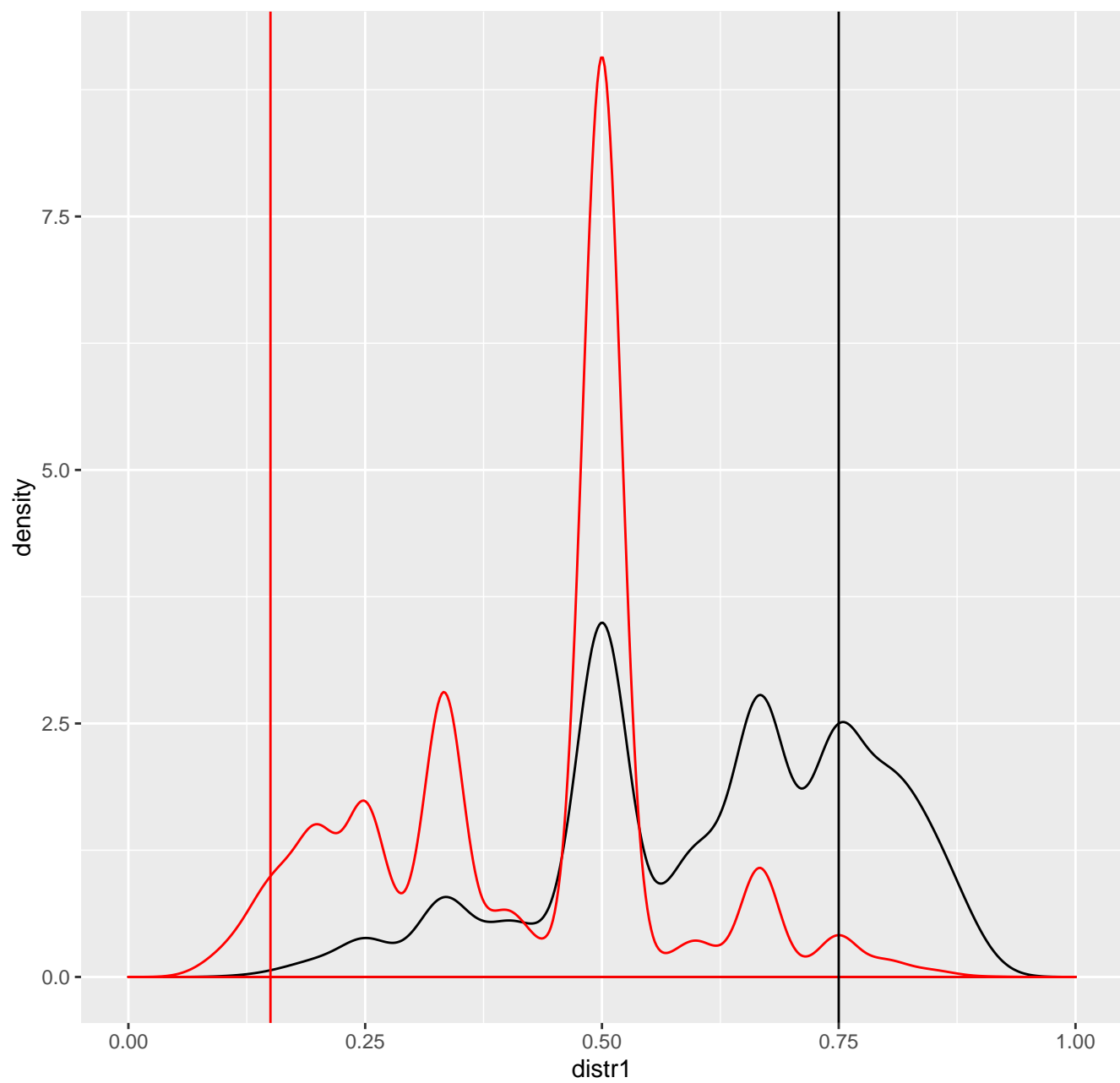
response distribution $Y|X1==0$ & $X2==1$



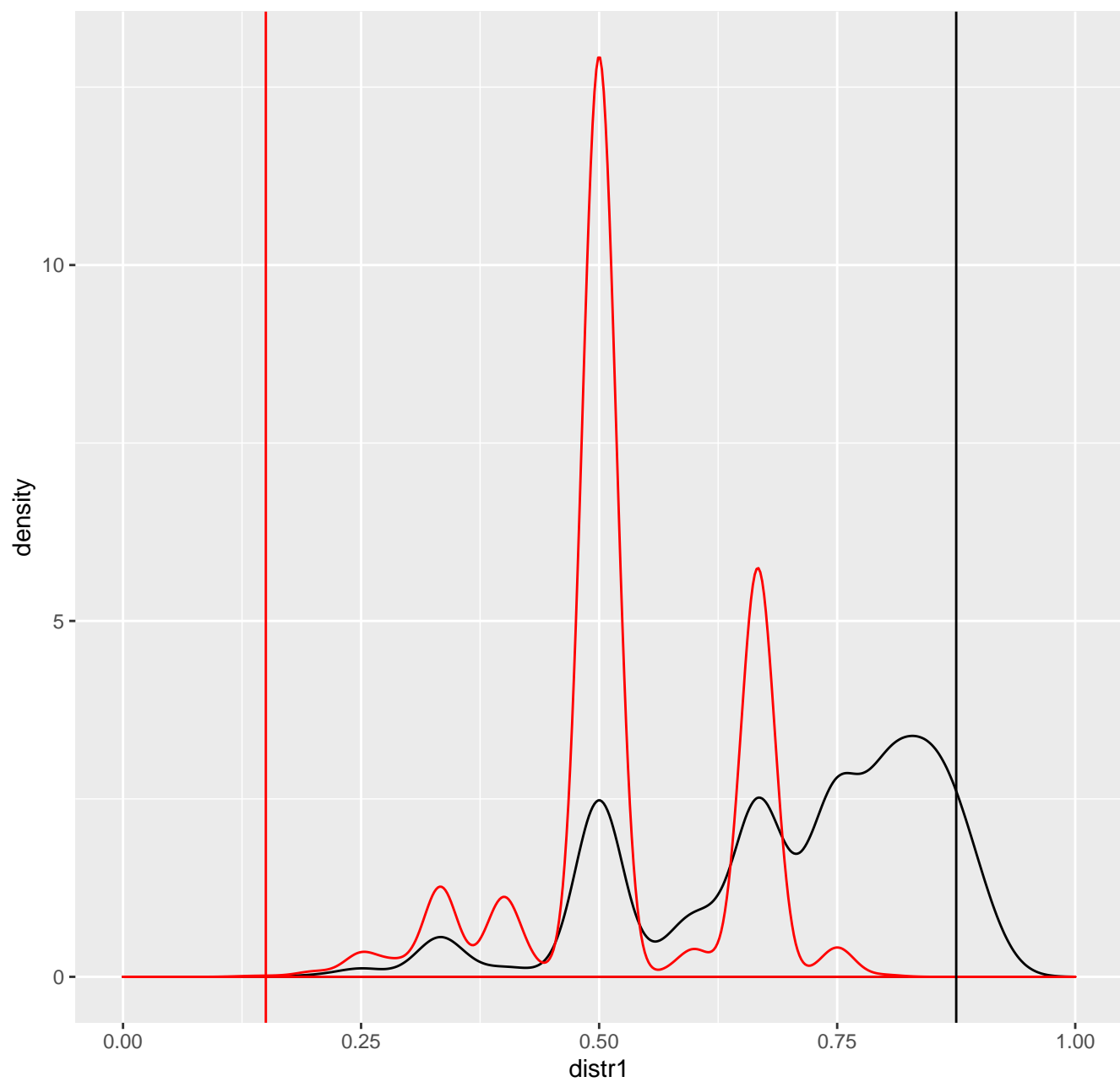
response distribution $Y|X1==1$



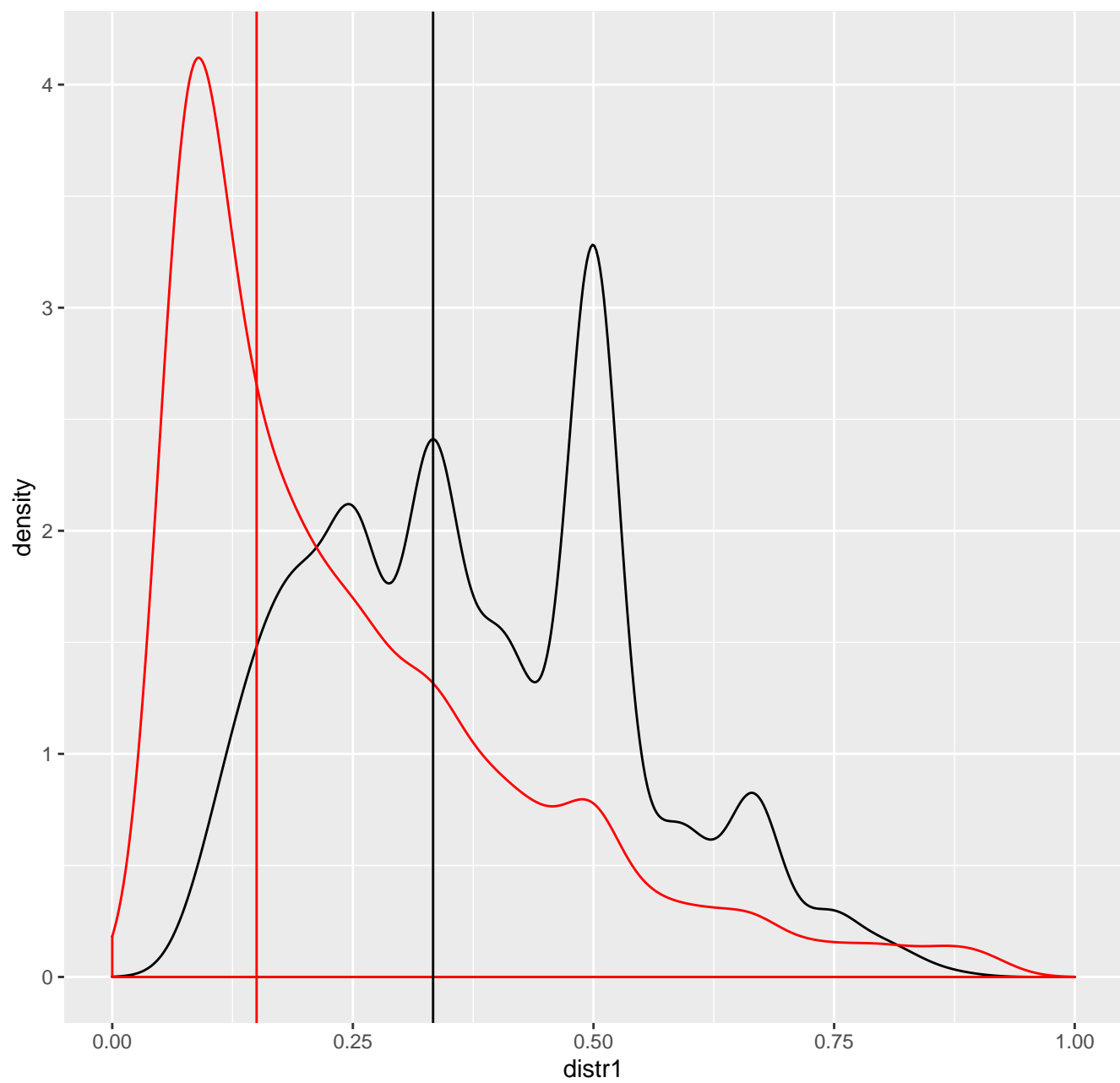
response distribution $Y|X1==1 \text{ \& } X2==0$



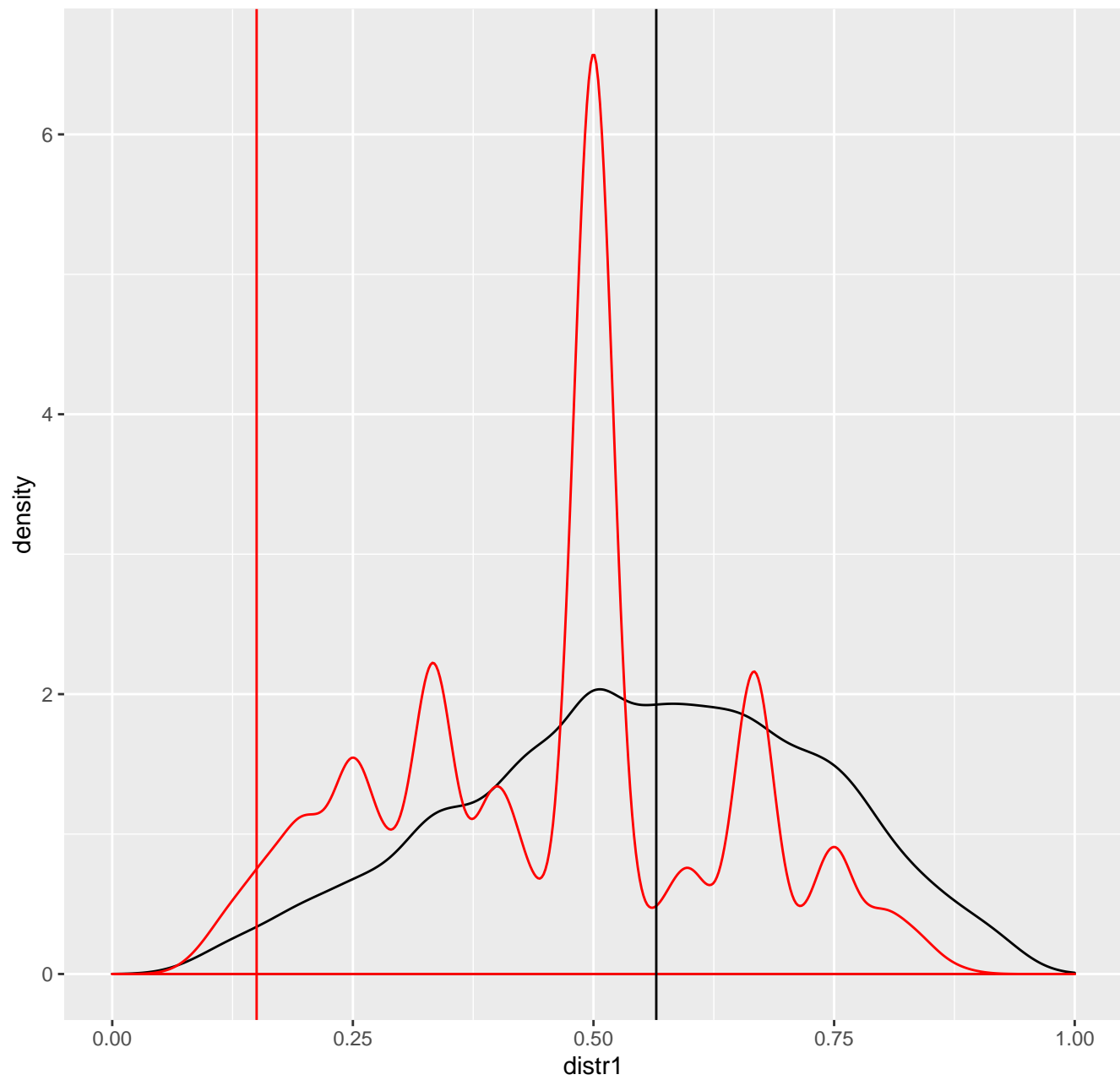
response distribution $Y|X_1==1 \text{ \& } X_2==1$



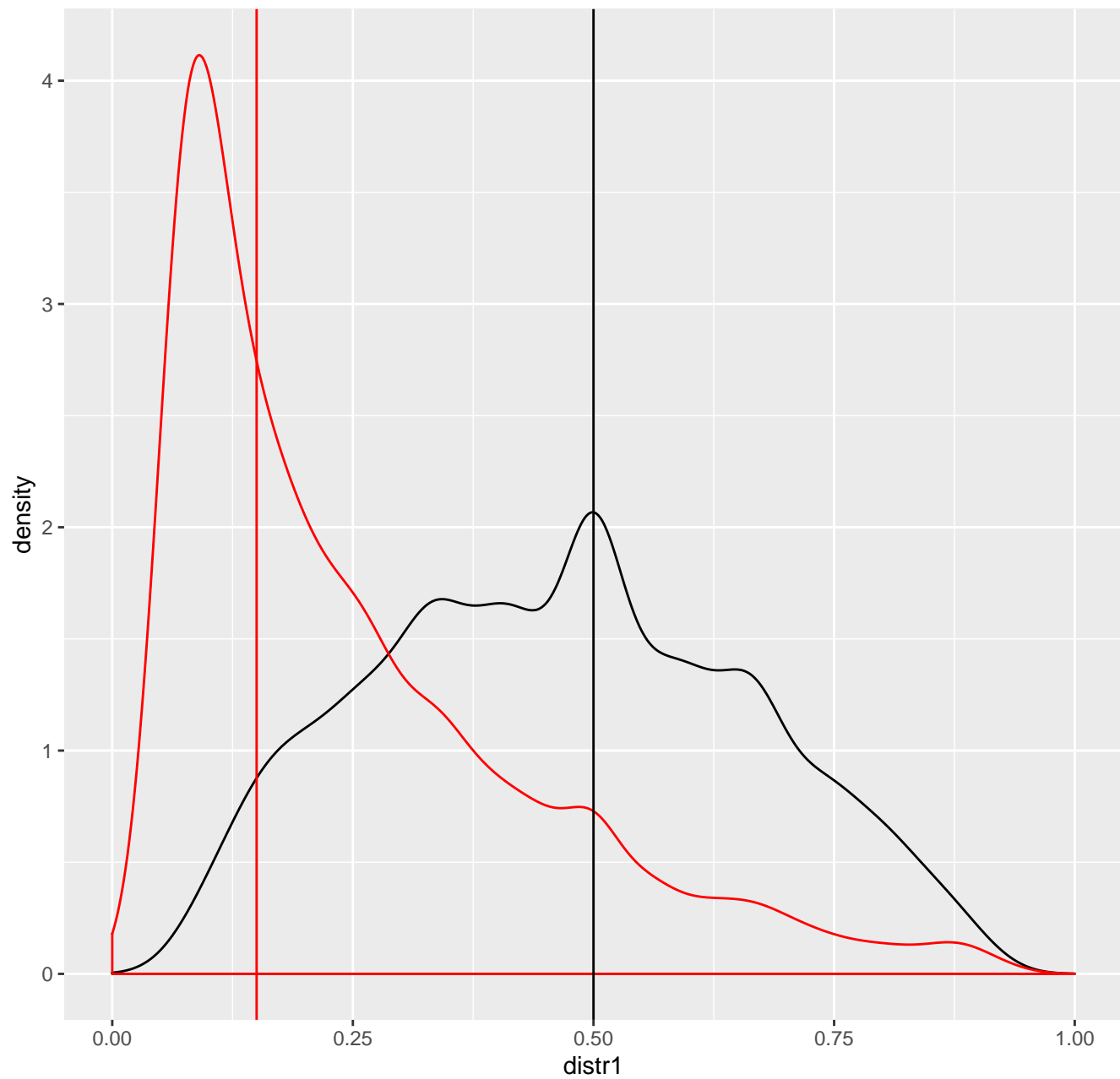
response distribution $X_2|Y==0$



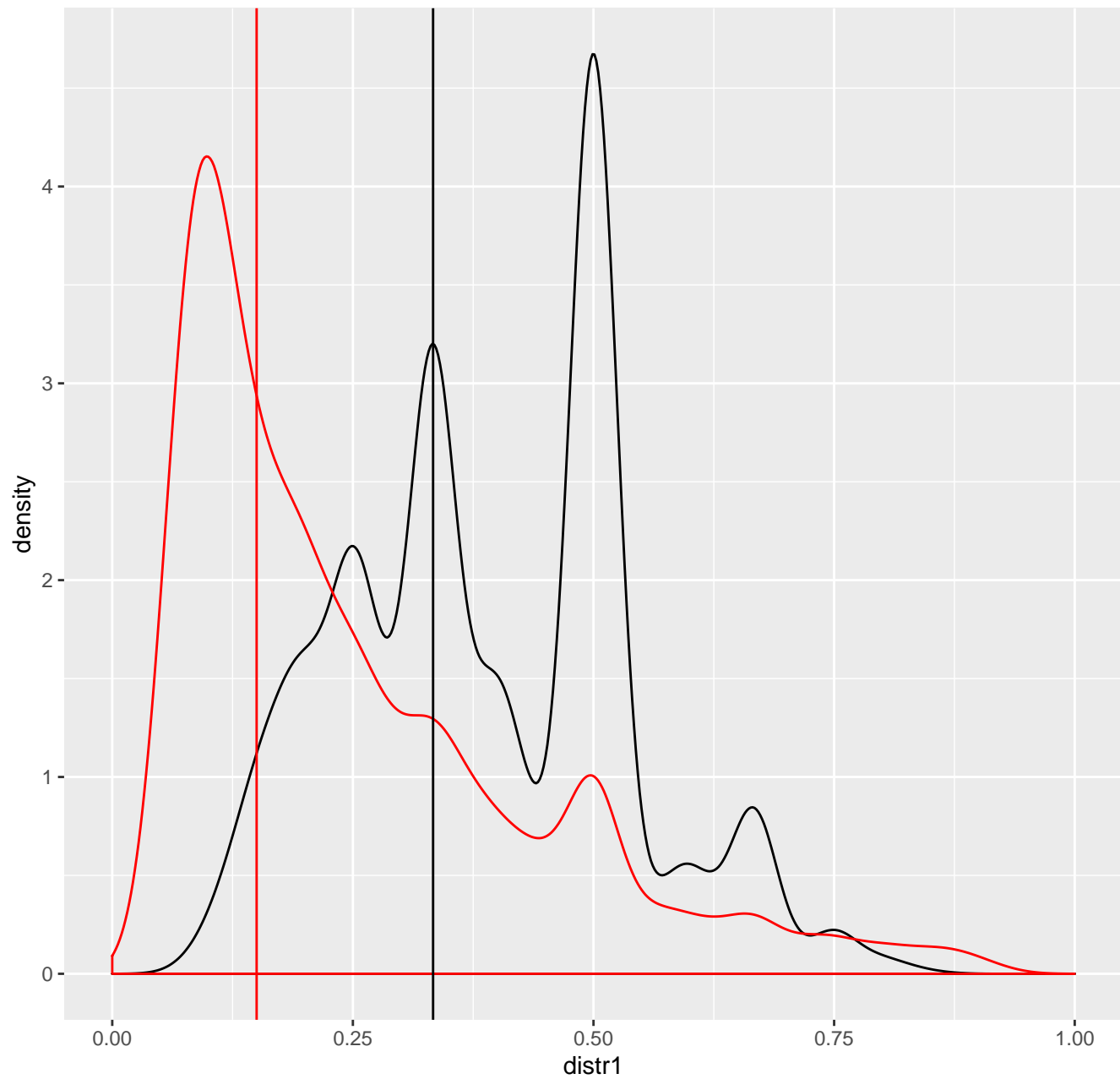
response distribution $X_2|Y==1$



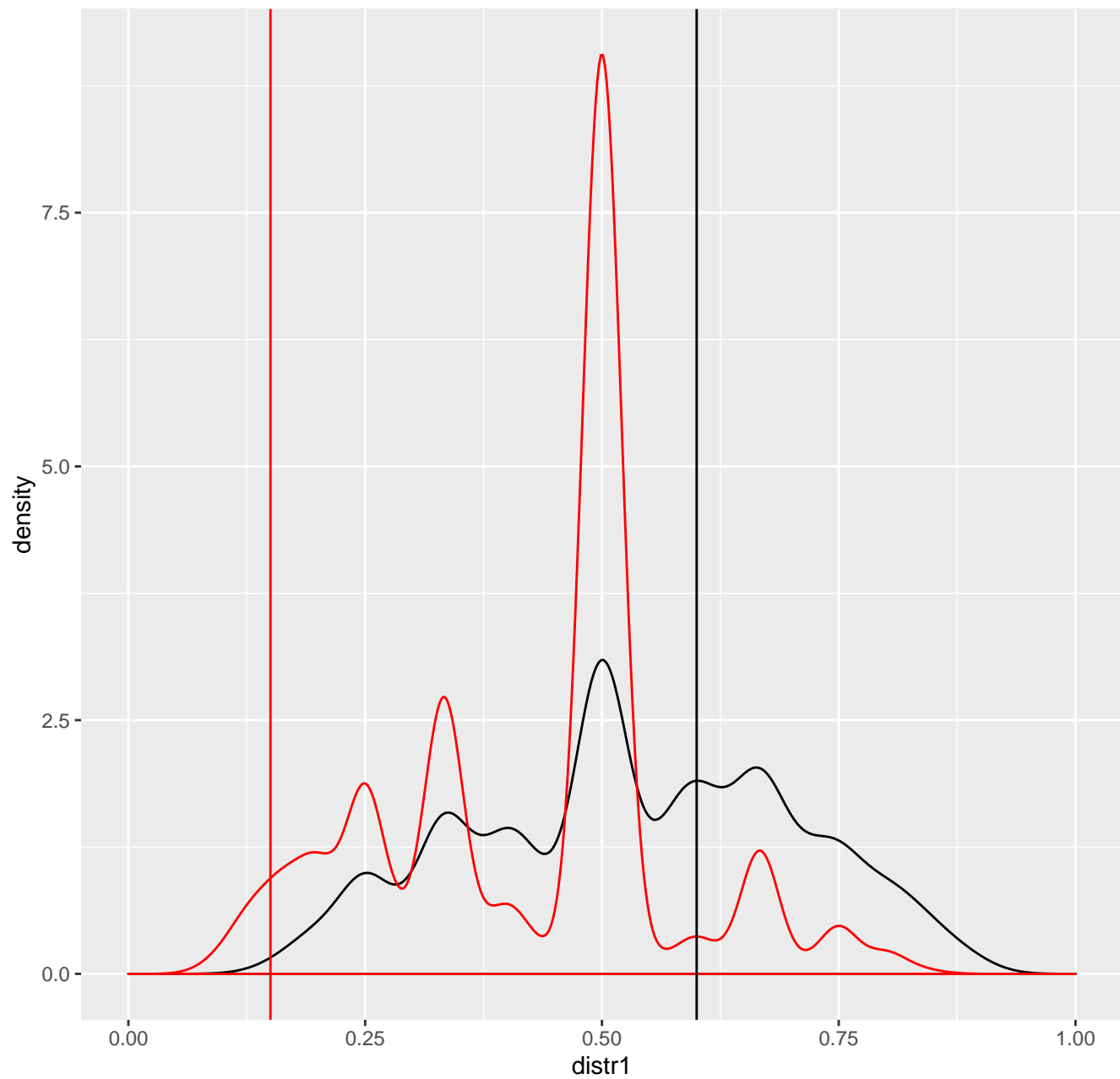
response distribution $X_2|X_1==0$



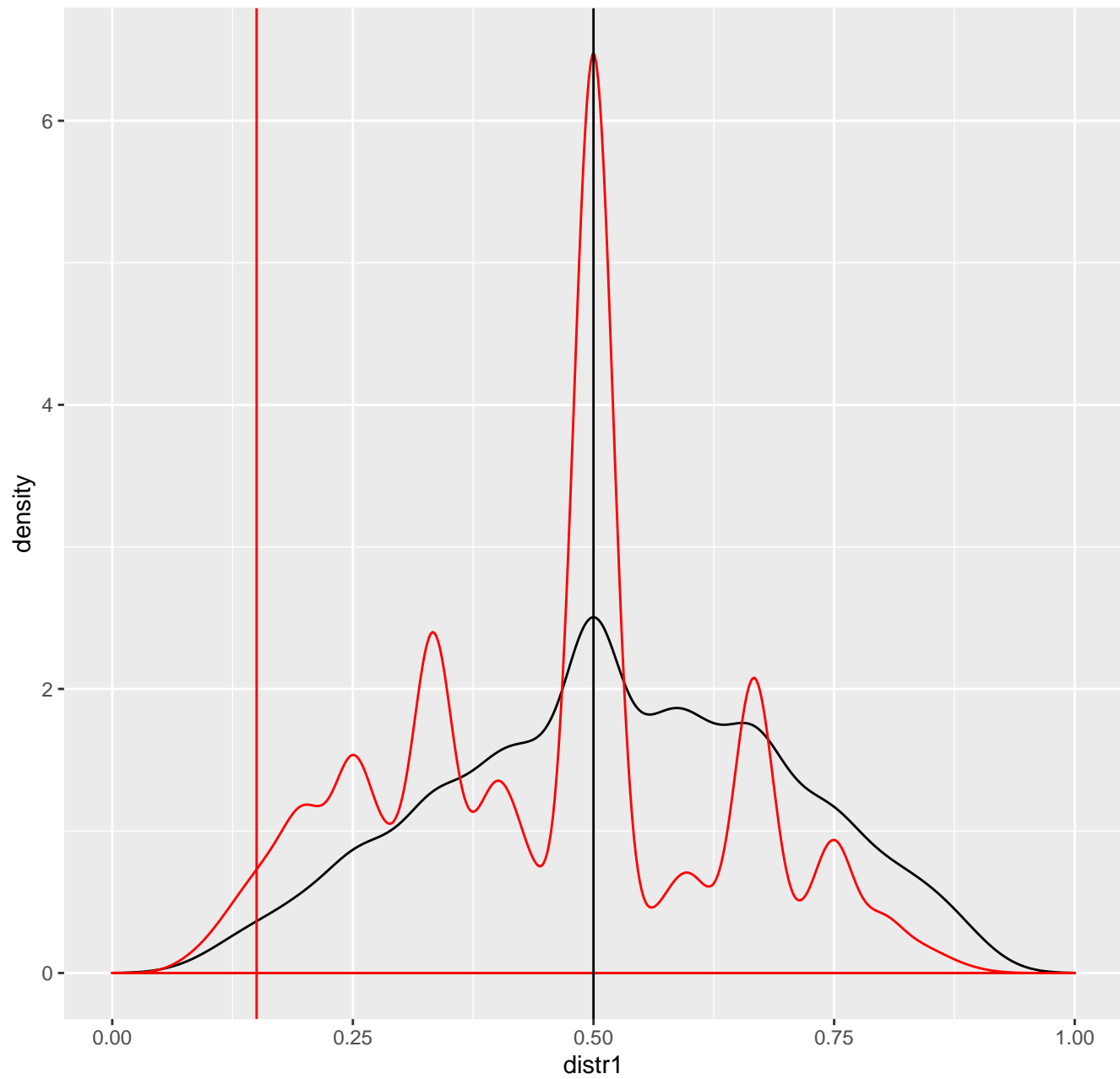
response distribution $X_2|Y==0 \text{ \& } X_1==0$



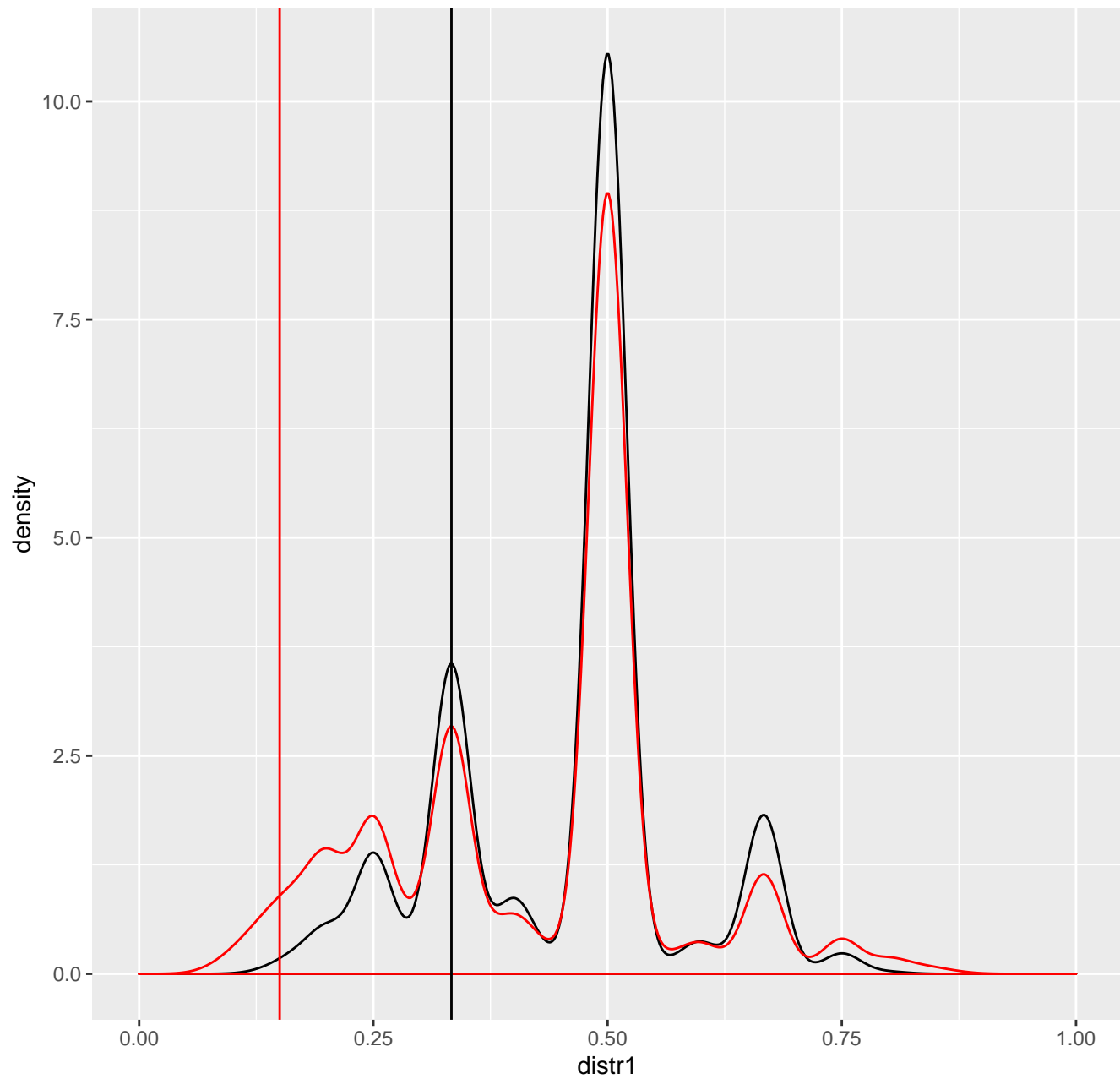
response distribution $X_2|Y==1 \text{ \& } X_1==0$



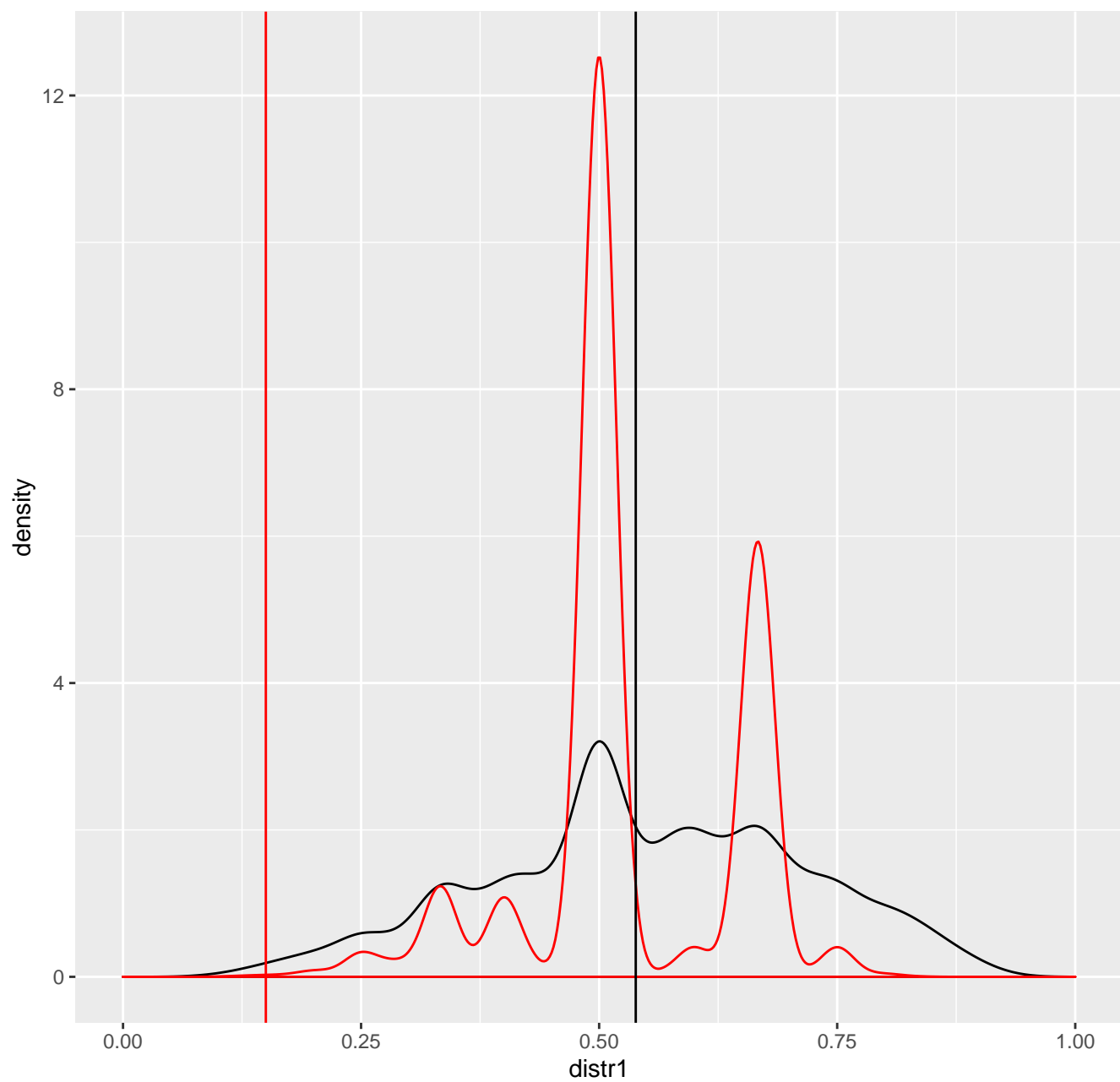
response distribution $X_2|X_1=1$



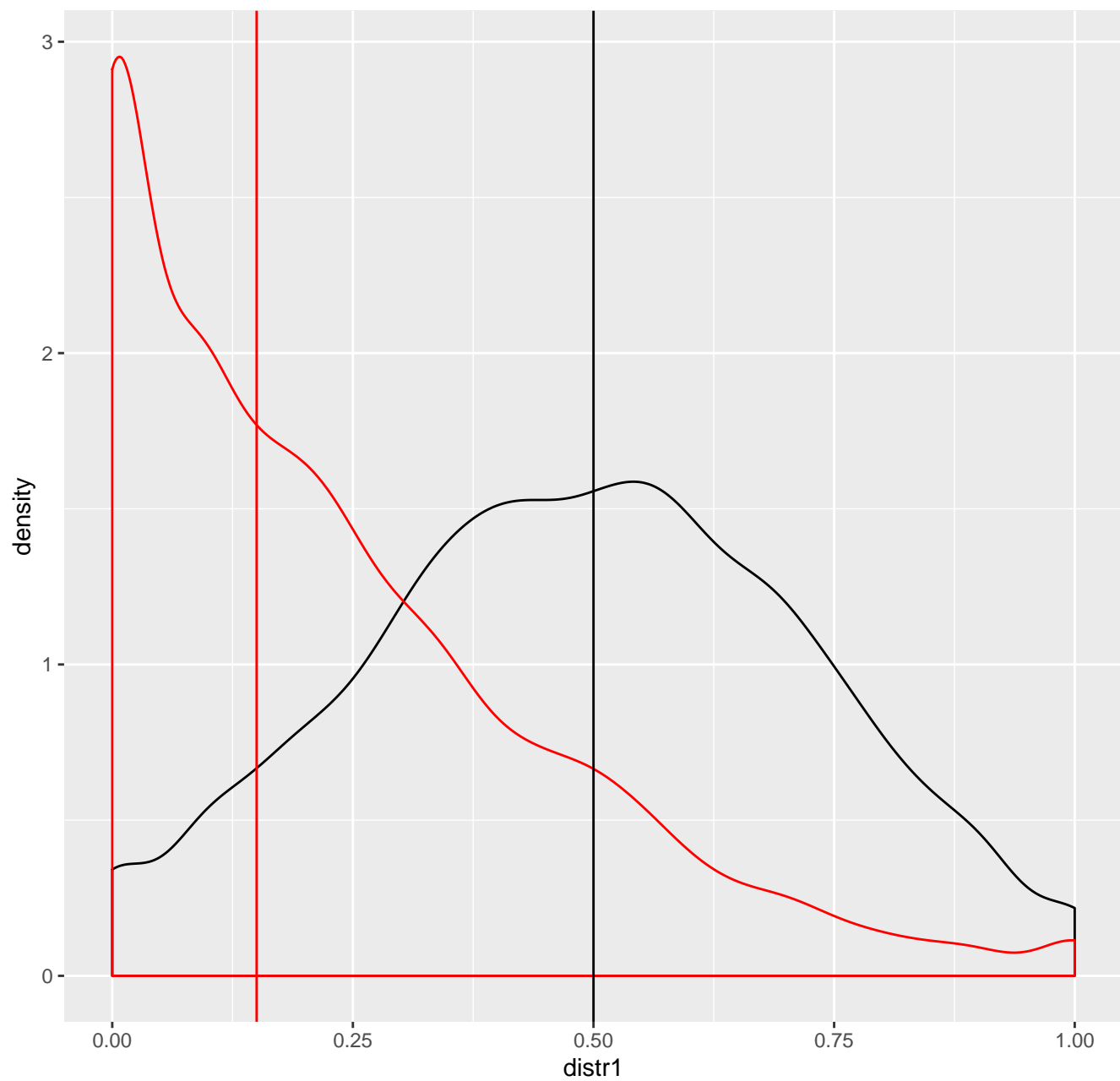
response distribution $X_2|Y==0$ & $X_1==1$



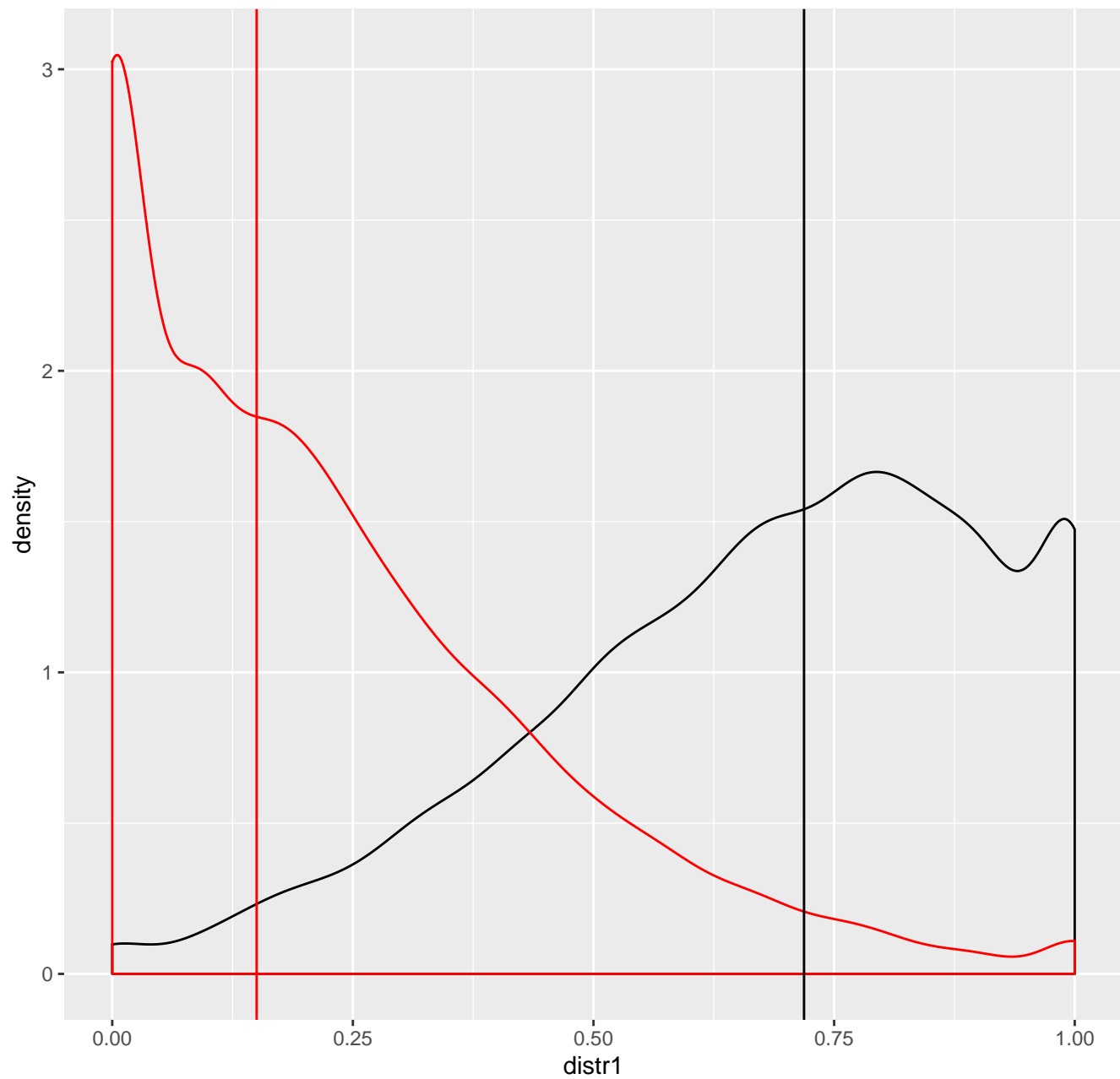
response distribution $X_2|Y==1$ & $X_1==1$



response distribution X1



response distribution Y



response distribution X2

