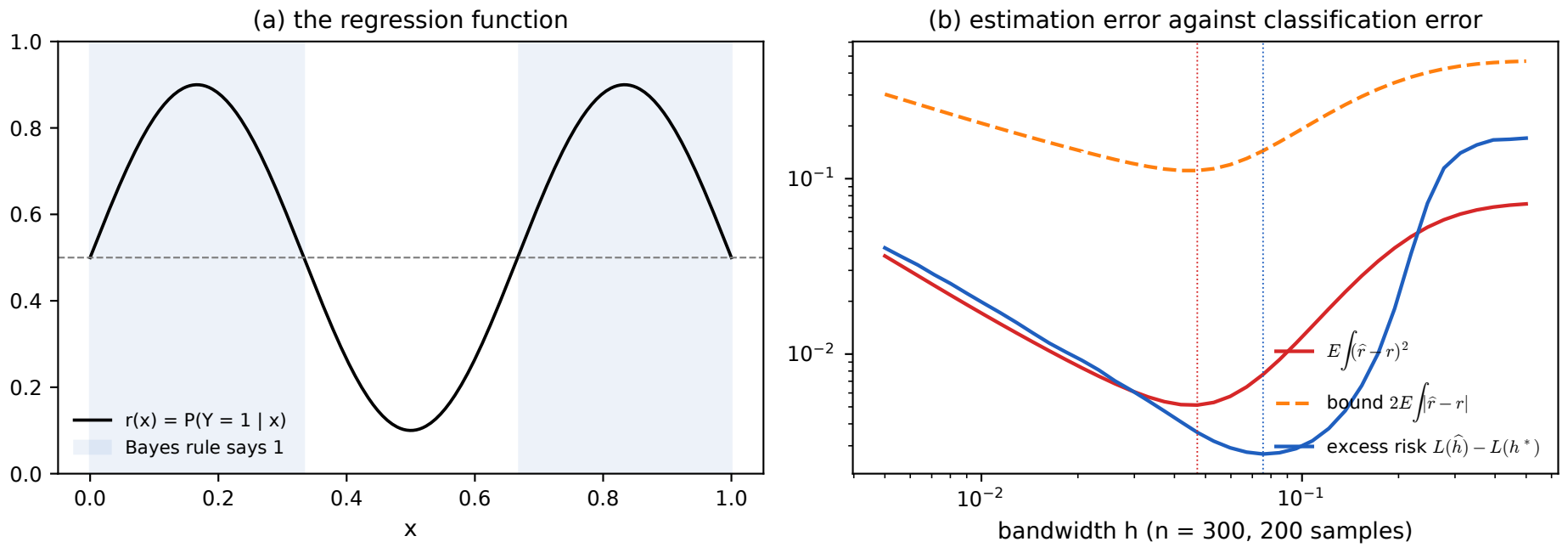

(a) the regression function
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0
x
r(x) = P(Y = 1 | x)
Bayes rule says 1
(b) estimation error against classification error
10^{-1}
10^{-2}
10^{-2}
10^{-1}
bandwidth h (n = 300, 200 samples)
$E\int(\hat{r}-r)^2$
bound $2E\int|\hat{r}-r|$
excess risk $L(\widehat{h})-L(h^*)$