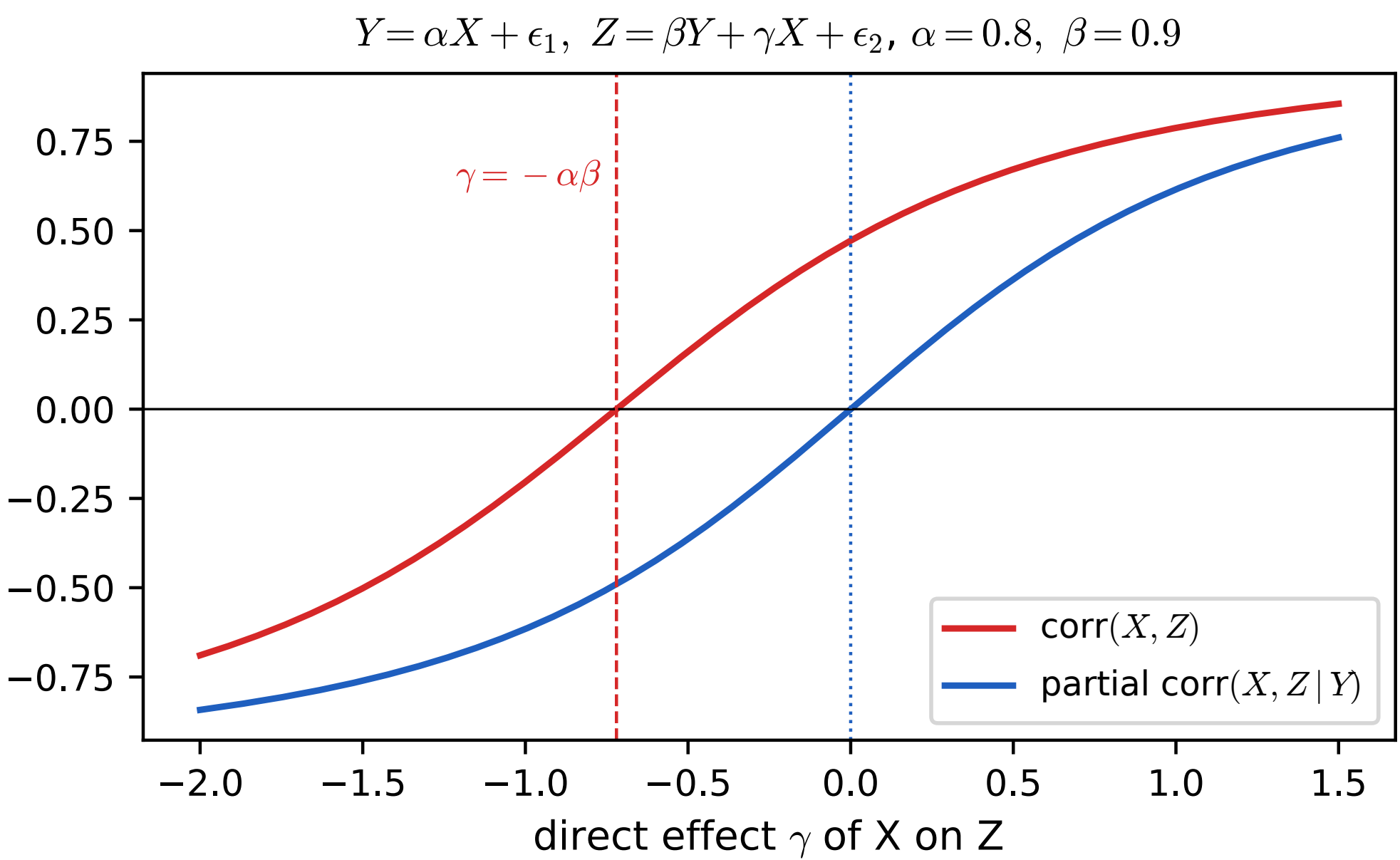

$Y = \alpha X + \epsilon_1,\ Z = \beta Y + \gamma X + \epsilon_2,\ \alpha = 0.8,\ \beta = 0.9$
$\gamma = -\alpha\beta$
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−2.0
−1.5
−1.0
−0.5
0.0
0.5
1.0
1.5
direct effect γ of X on Z
corr(X, Z)
partial corr$(X, Z \mid Y)$