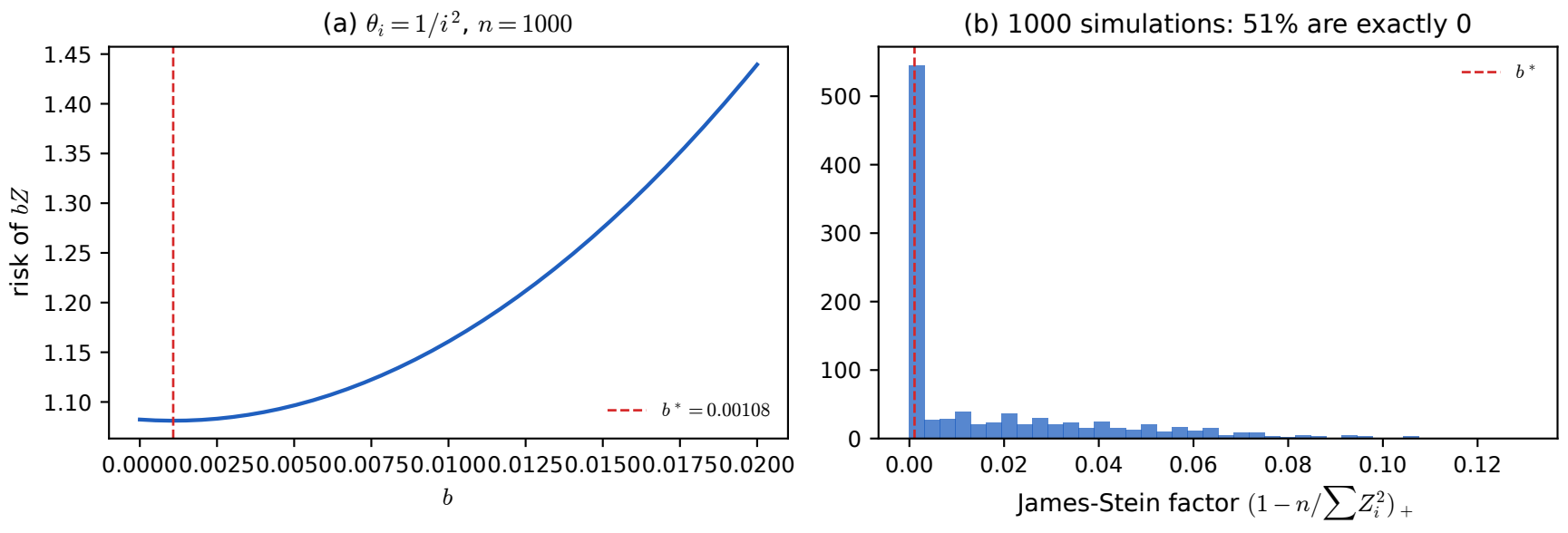

(a) $\theta_i = 1/i^2$, $n = 1000$
risk of bZ
1.45
1.40
1.35
1.30
1.25
1.20
1.15
1.10
$b^* = 0.00108$
0.0000
0.0025
0.0050
0.0075
0.0100
0.0125
0.0150
0.0175
0.0200
b
(b) 1000 simulations: 51% are exactly 0
b^*
500
400
300
200
100
0
0.00
0.02
0.04
0.06
0.08
0.10
0.12
James-Stein factor $(1 - n/\sum Z_i^2)_+$