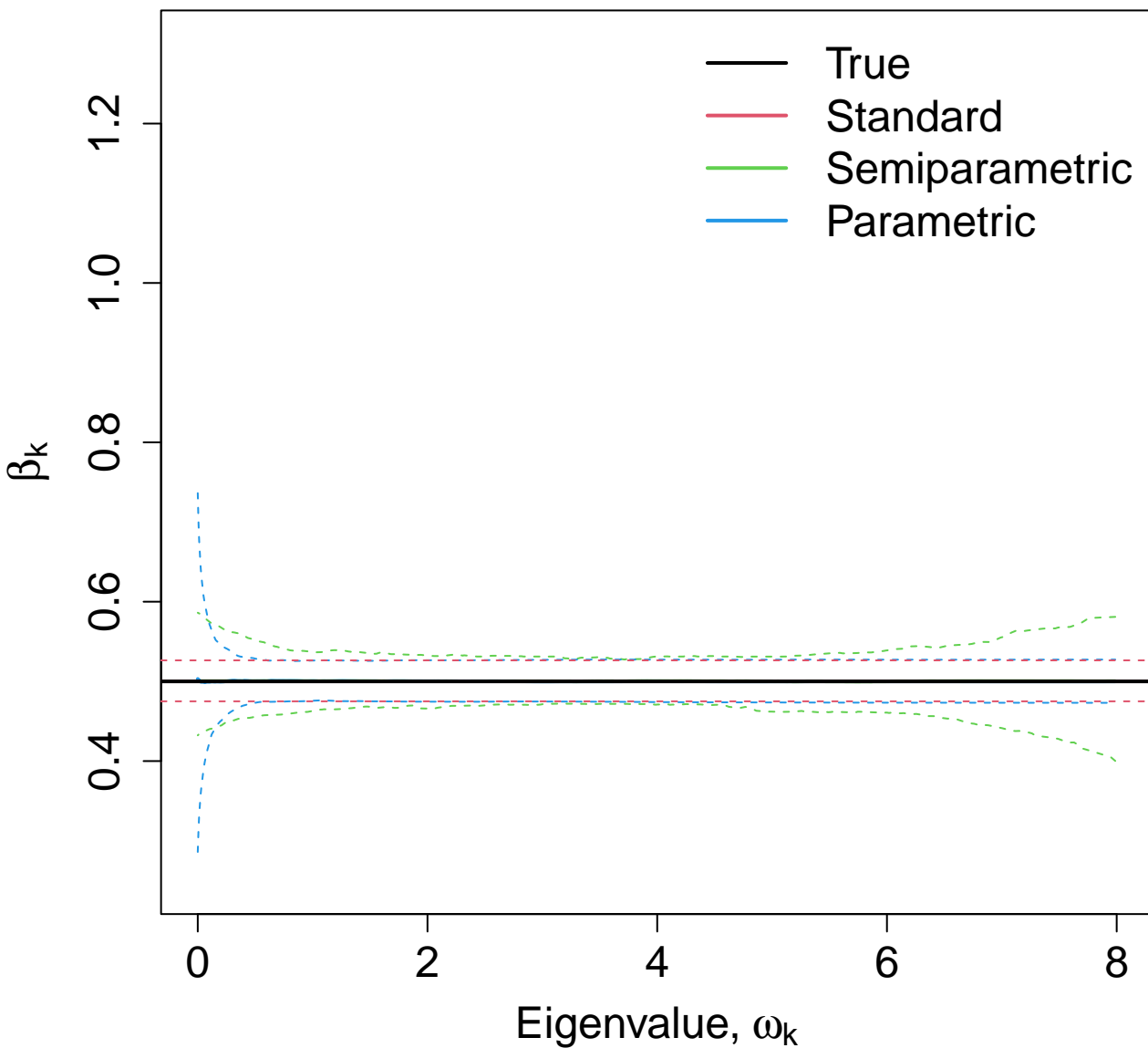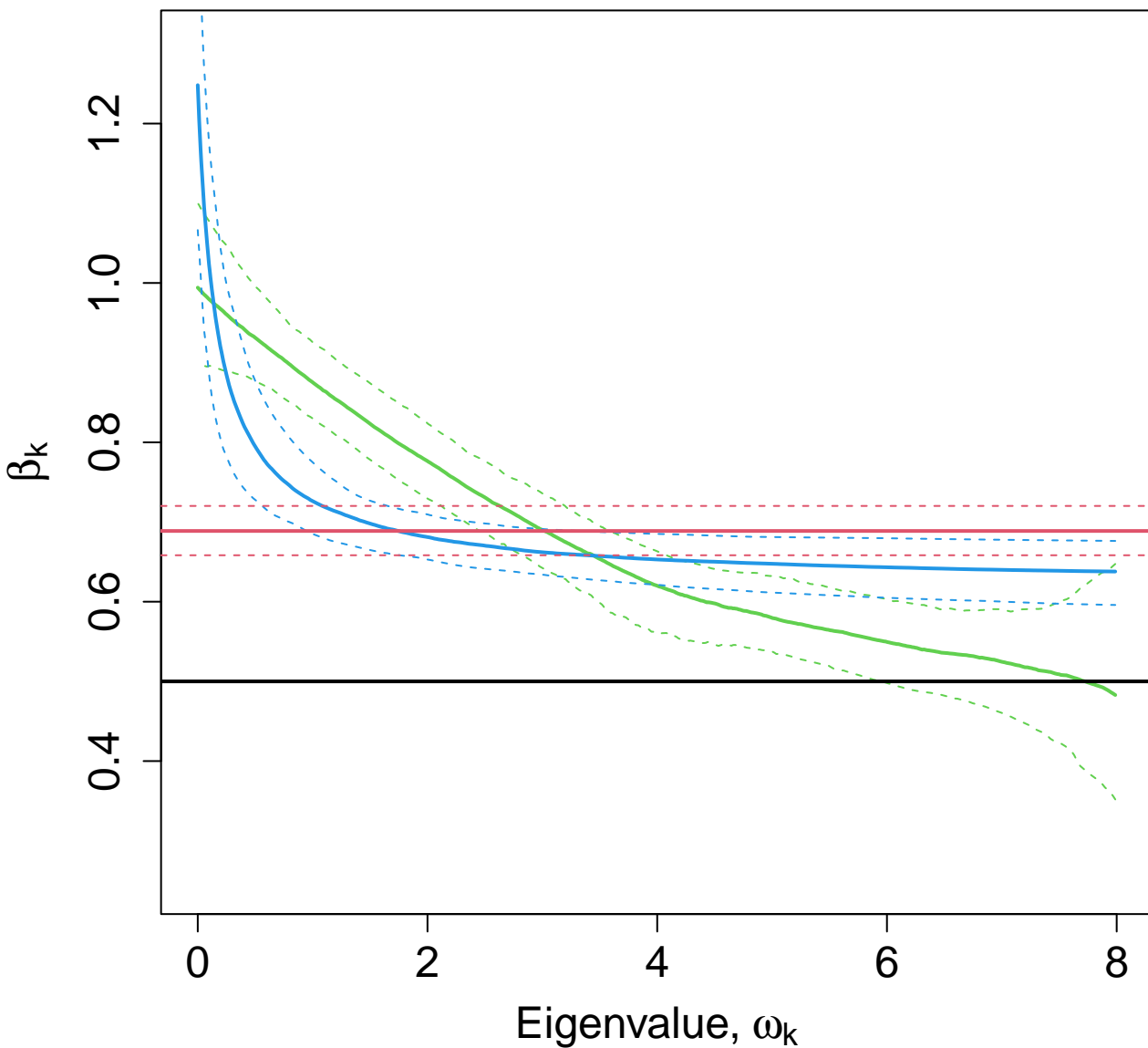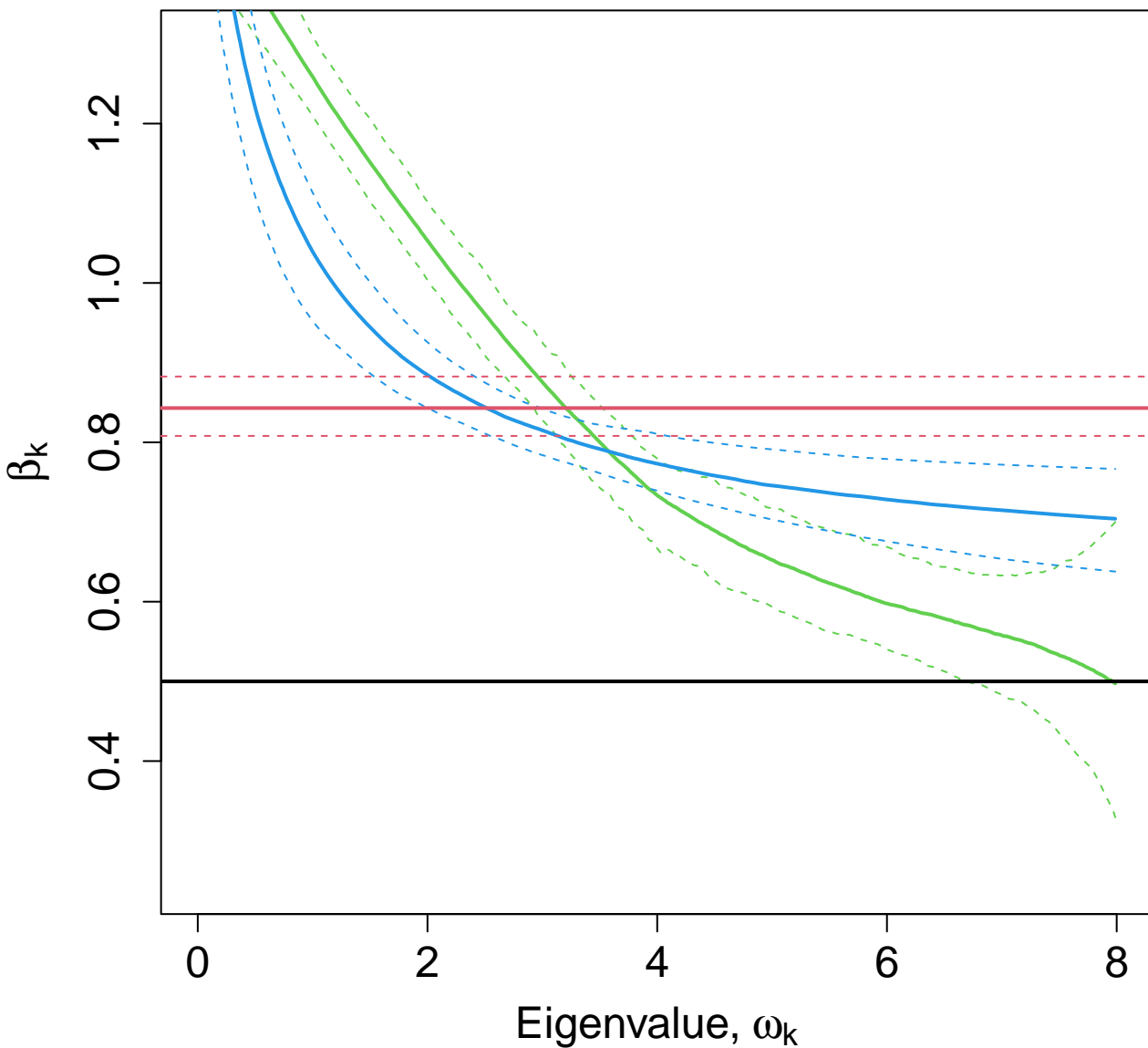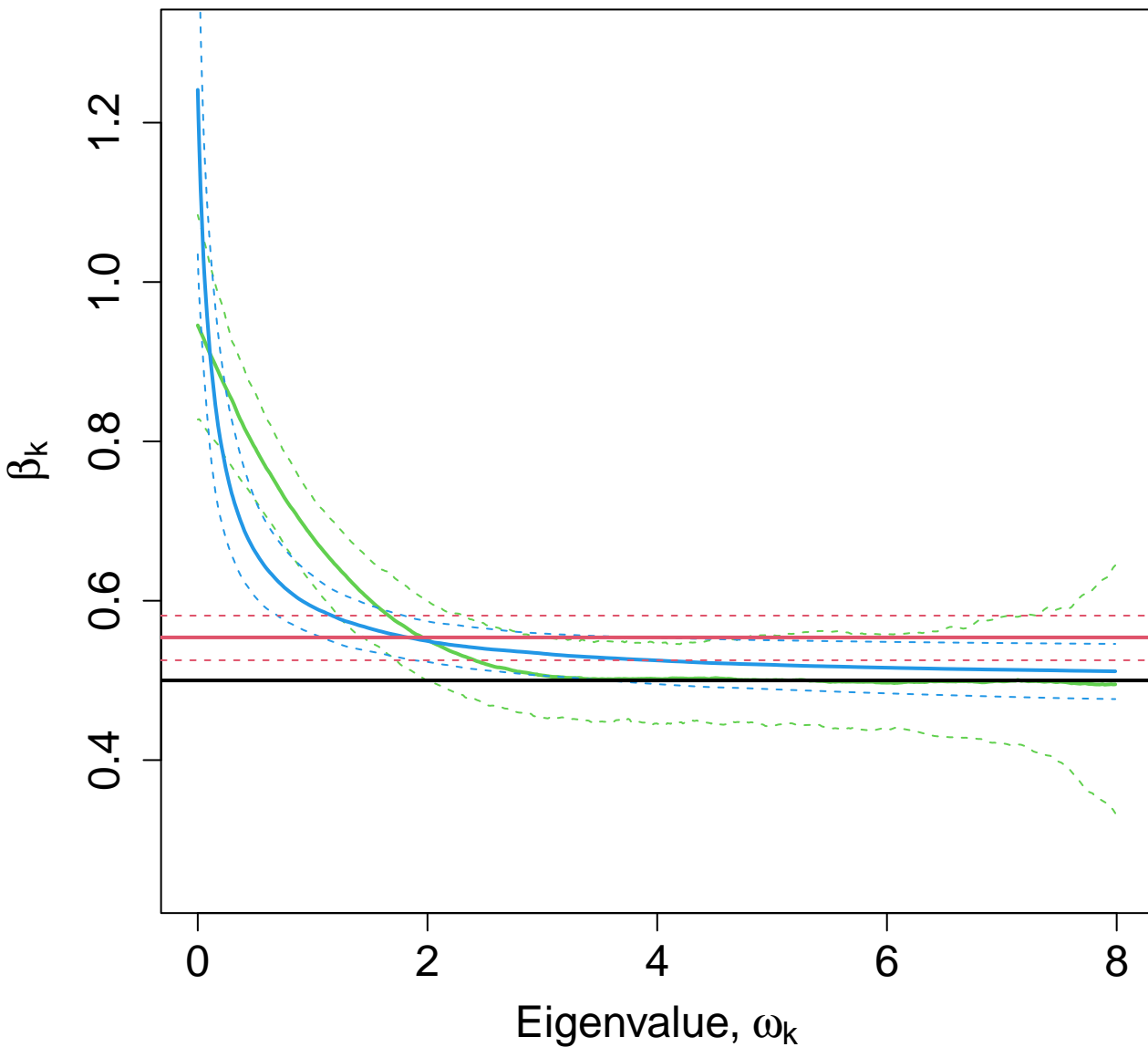(a) $\beta_{XZ} = 0$

(b) $\phi = 1$ and $\beta_{XZ} = 1$

(c) $\phi = 1$ and $\beta_{XZ} = 2$

(d) $\phi = 2$ and $\beta_{XZ} = 1$

(e) $\phi = 2$ and $\beta_{XZ} = 2$