$$\frac{\boldsymbol{\theta}^{\mathsf{T}}\bar{\boldsymbol{\theta}} \geq \bar{\boldsymbol{\theta}}^{\mathsf{T}}\bar{\boldsymbol{\theta}}}{\gamma = 0} \qquad \frac{\boldsymbol{\theta}^{\mathsf{T}}\bar{\boldsymbol{\theta}} < \bar{\boldsymbol{\theta}}^{\mathsf{T}}\bar{\boldsymbol{\theta}} \text{ and } \boldsymbol{\theta}^{\mathsf{T}}\bar{\boldsymbol{\theta}} < \boldsymbol{\theta}^{\mathsf{T}}\boldsymbol{\theta}}{\|\bar{\boldsymbol{\theta}} - \boldsymbol{\theta}\|_{2}^{2}} \qquad \qquad \gamma = 1$$