$$\psi_1 = \psi(\underline{v}_1, \underline{k}_1) = \psi(\underline{v}(s_1), \underline{k}(s_1))$$

$$\psi_2 = \psi(\underline{v}_2, \underline{k}_2) = \psi(\underline{v}(s_2), \underline{k}(s_2))$$