

$$AV = \lambda V$$

$$A = I - \Sigma \eta (\eta^T \Sigma \eta)^{-1} \eta^T$$

then $\eta^T A = \eta^T - \eta^T = 0 \Rightarrow A$ is not invertible!

$$\eta^T Z = 0!$$

$$Z = (I - \Sigma \eta \eta^T)$$

$$z_1 = Y - \eta_1 F_Z \quad z_2 = Y - \eta_2 F_Z$$

$$P(P \in D \mid P_i = p_i^*, I)$$

$$\Rightarrow = P(\underbrace{F_Z^{-1}(P)}_{=X} \in F_Z^{-1}(D) \mid \underbrace{F_Z^{-1}(P_i)}_{X_i} = F_Z^{-1}(p_i))$$

$$P(F_Z^{-1}(P) \in F_Z^{-1}(D) \mid F_Z^{-1}(P_i) = F_Z^{-1}(p_i), I, Z)$$