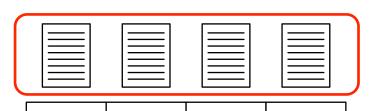
Legislator a votes 'Yea' on bill b with probability





YEA	NAY	NAY	YEA



NAY

YEA YEA



YEA YEA NAY

$$| p(v_{a,b} = \text{Yea}) = \Phi \left(x_b \sum_{k=1}^K u_{a,k} \vartheta_{b,k} + y_b \right)$$