Test

$$AR(p): Y_i = c + \epsilon_i + \phi_i Y_{i-1} \dots$$
$$Y_i = c + \phi_i Y_{i-1} \dots$$

$$Y_{u,i} = \mu + \epsilon_{u,i}$$

$$Y_{u,i} = \mu + b_i + \epsilon_{u,i}$$

$$Y_{u,i} = \mu + b_u + \epsilon_{u,i}$$

$$Y_{u,i} = \mu + b_i + b_u + \epsilon_{u,i}$$