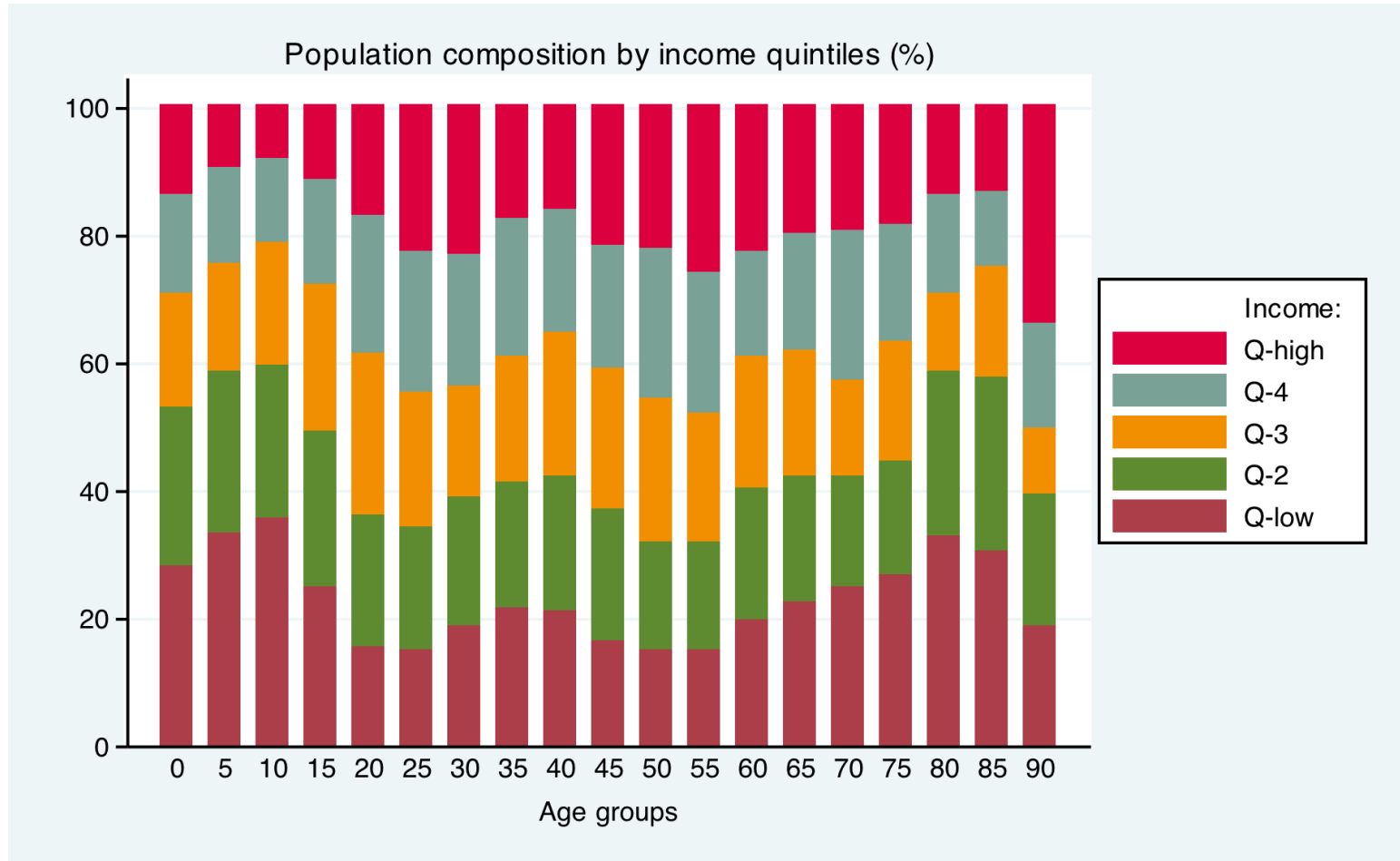


# NTA by income quintiles. Costa Rica 2004

Luis Rosero Bixby  
University of Costa Rica

# Population by income quintiles



# Estimating NTA by income quintiles: A proportional variation model

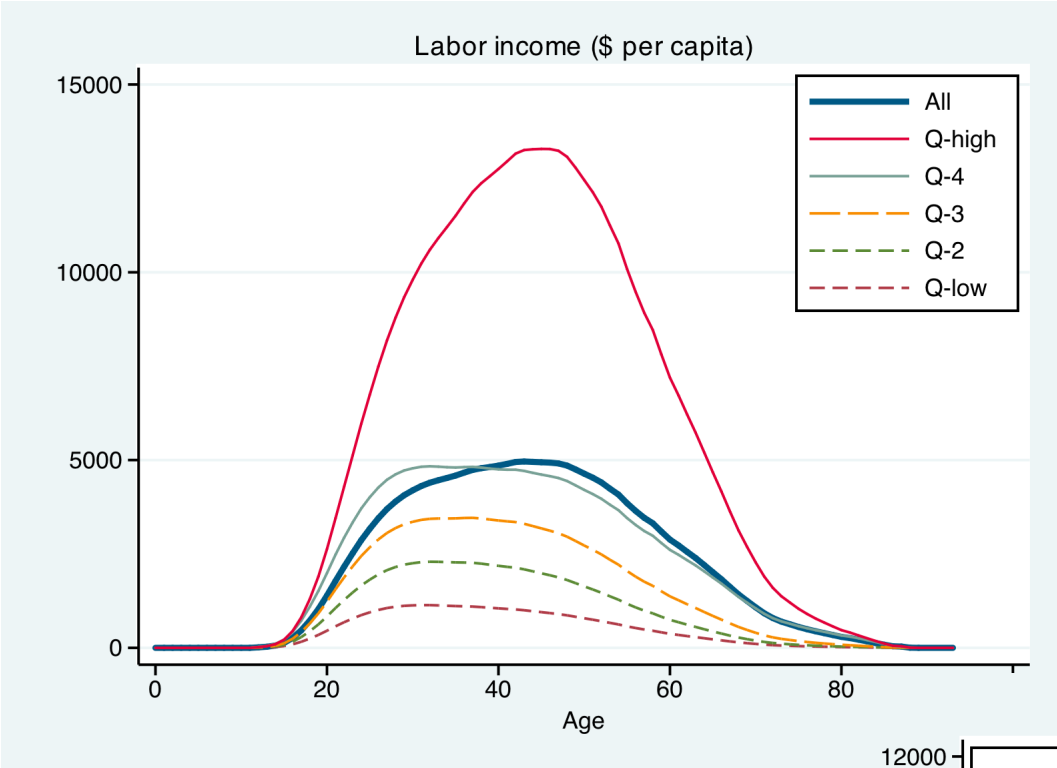
$$\hat{Y}_{xi} = S_x e^{\beta 0_i + \beta 1_i x + \beta 2_i x^2 + \varepsilon}$$

$x$  is age,  $i$  is the income quintile,

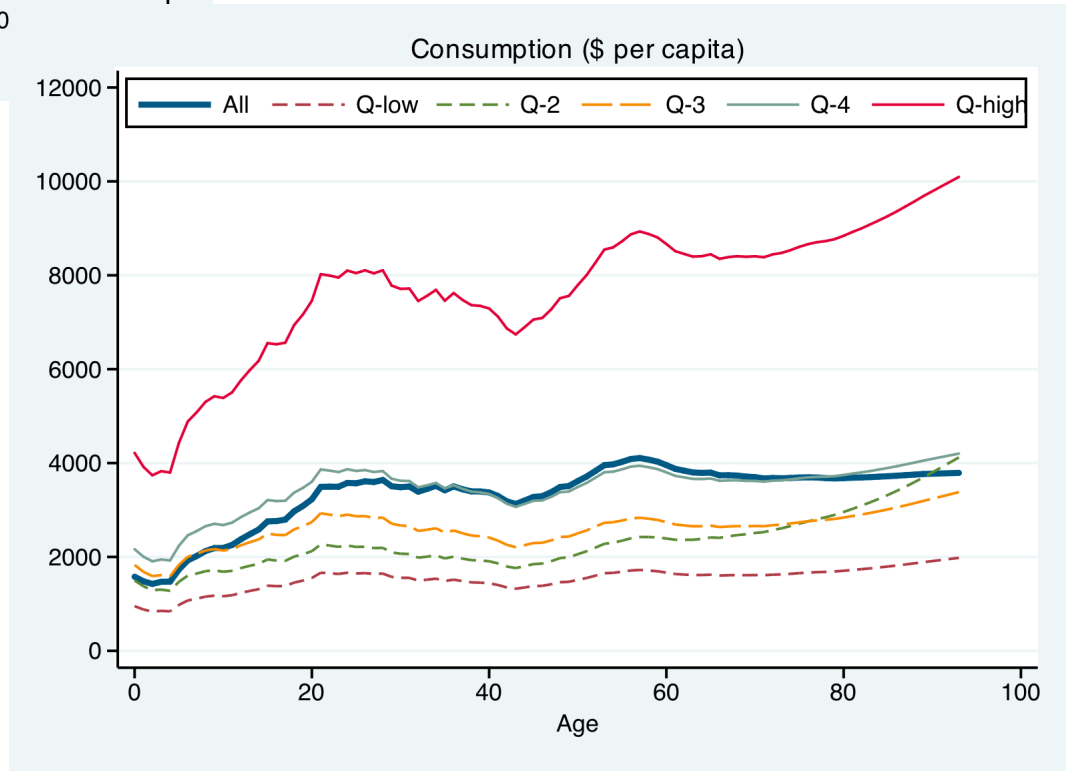
$Y$  is the account being estimated

$S$  is a reference standard (the age profile  
of the account  $Y$ )

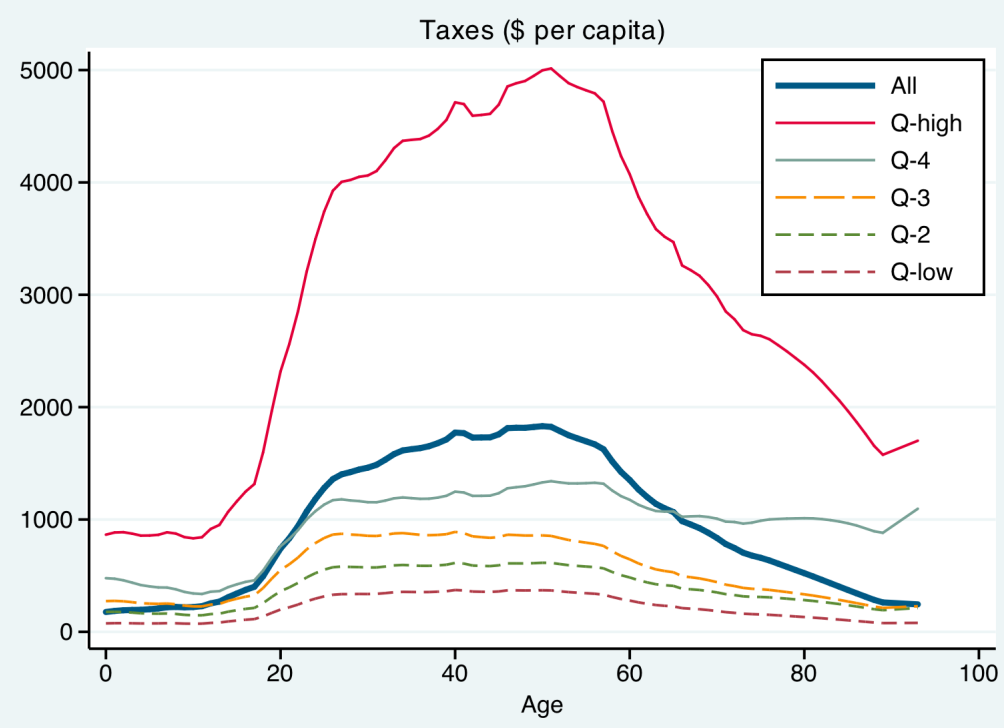
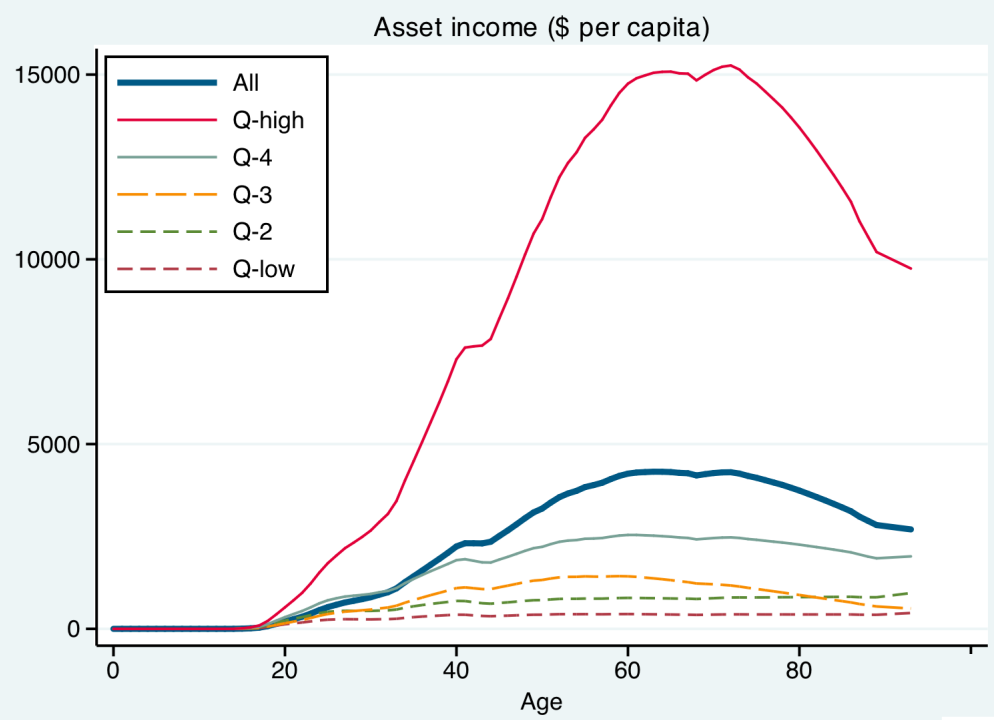
$\beta 0, \beta 1, \beta 2$  are parameters estimated with  
*Poisson regression*



LCD

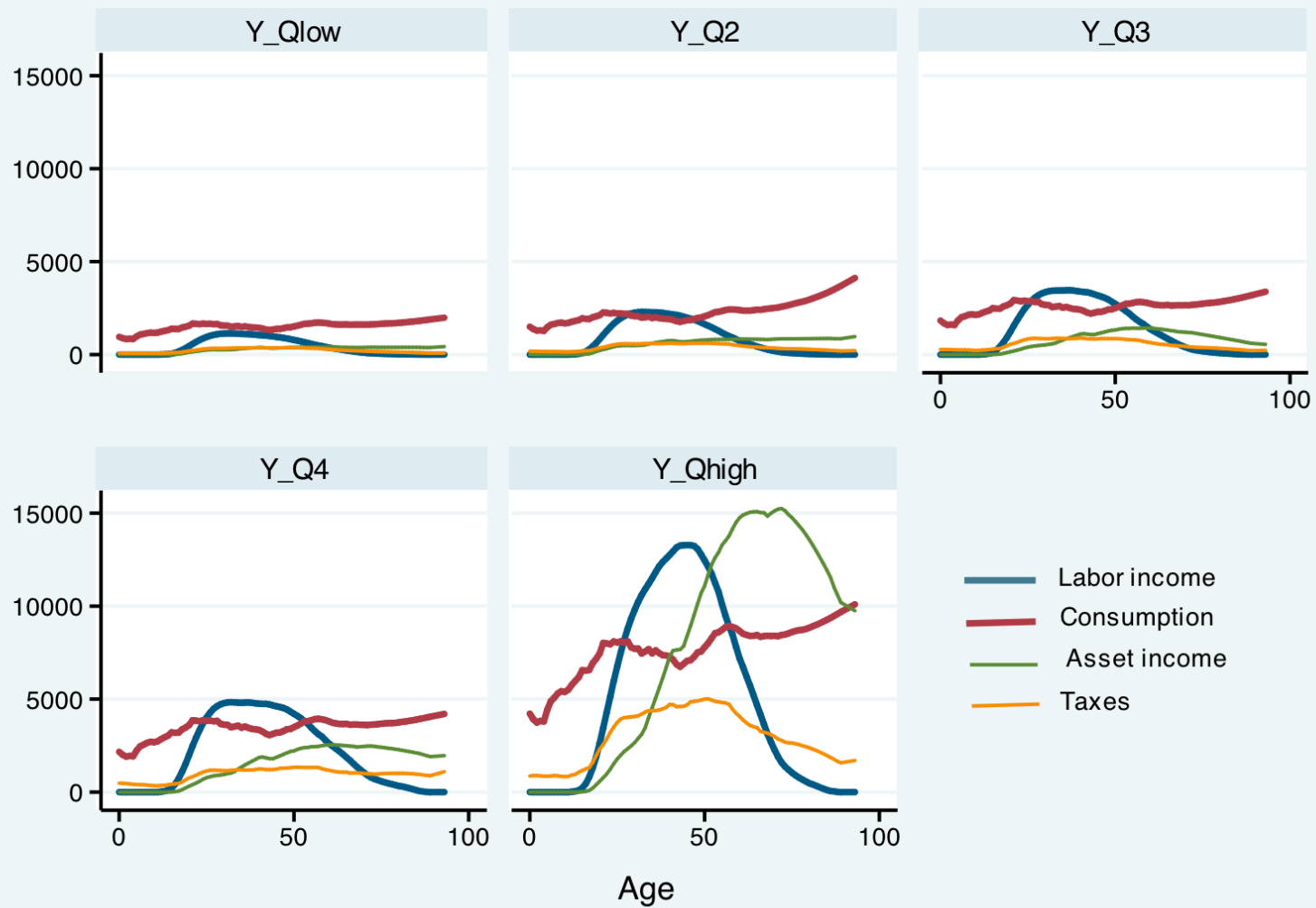


# Asset income & taxes paid



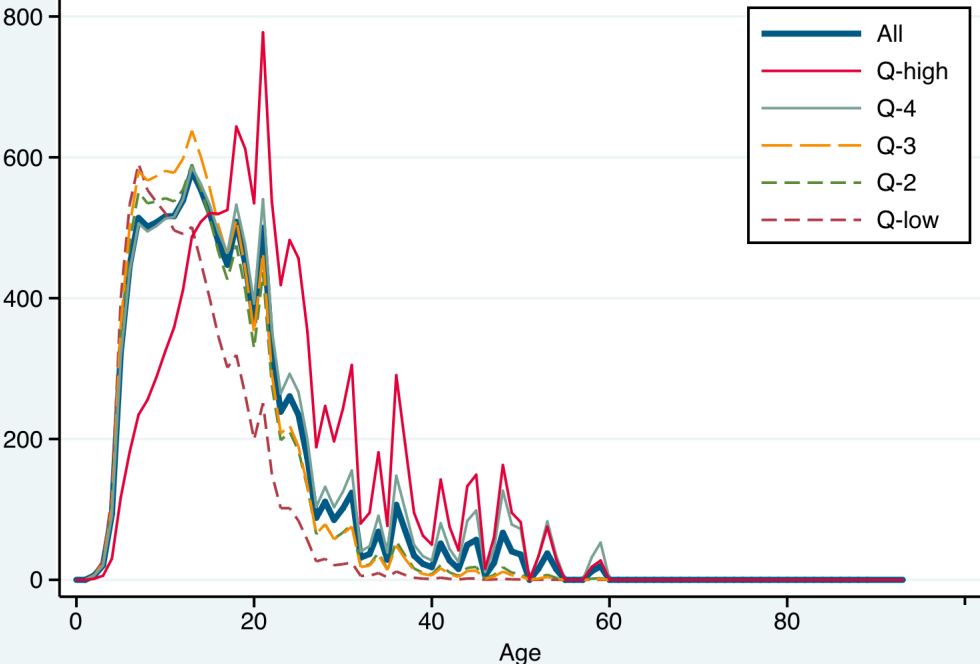
# Life Cycle Deficit et al.

US\$ per capita

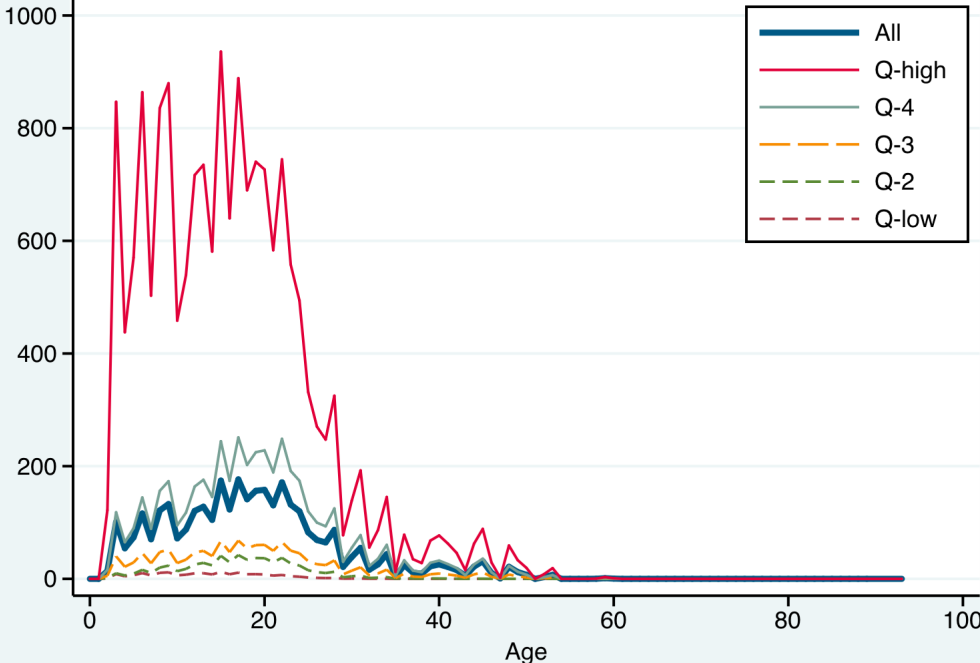


# Education

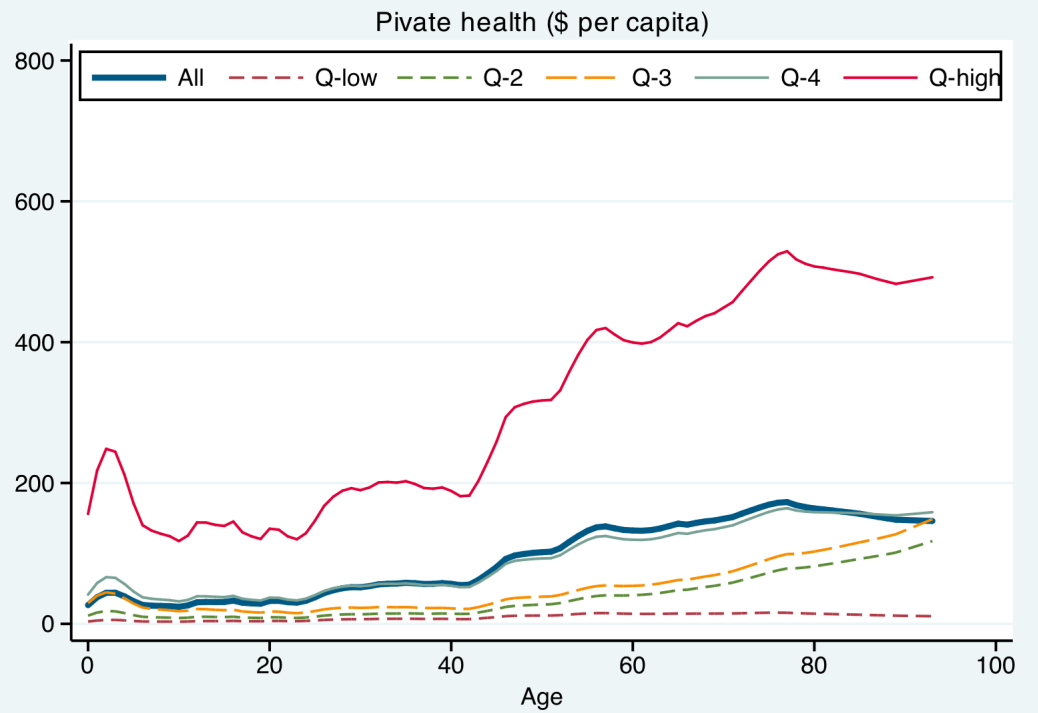
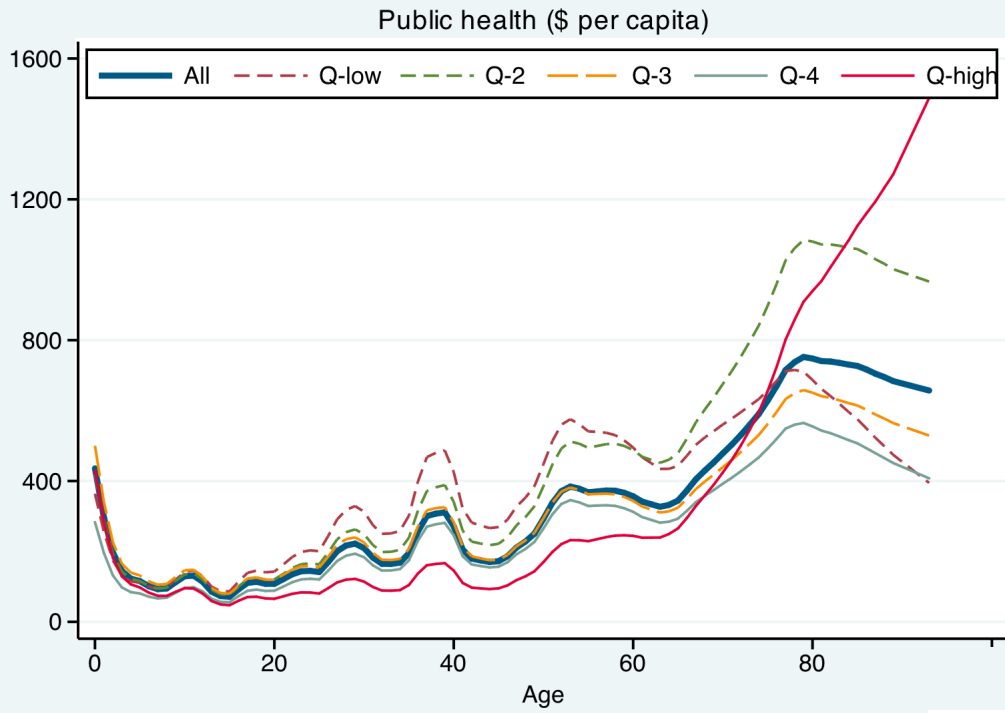
Public education (\$ per capita)



Private education (\$ per capita)



# Health





# Discussion--next steps

- Educational 5 groups (same results)
- Other accounts by SES? Public pensions...
- Shall we try to estimate transfers between SES groups? (not so hard for public transfers)
- Gini or other inequality indicators?
- Generational interpretations?