Age Consumption/Income Profiles In Data and Theory

This handout reproduces figures from Carroll (1997) showing the profiles of income and consumption by age across different occupation groups from the 1960-61 Consumer Expenditure Survey. The unconstrained perfect foresight/certainty equivalent life cycle model implies that there should be no relationship between the pattern of the consumption profile and the income profile, since the shape of the consumption profile is determined by tastes independently of the shape of the income profile.

In practice, there seems to be a strong connection between the income and consumption profiles. The second set of figures shows the implications of a “buffer stock” model of optimizing life cycle behavior in which consumers are modestly impatient, have a standard CRRA utility function with a precautionary saving motive, and face uncertain income. Consumers in this model optimally engage in buffer stock saving behavior until 10-15 years before retirement, as a result of their combination of impatience and prudence. This model is thus capable of matching the broad pattern of the data.
Figure IV
Lifetime Consumption and Income Profiles
Figure V
Age Profiles of Consumption Predicted by the Model for Three Profiles of Lifetime Income
References