Presentation

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Introduction

- "Time-varying idiosyncratic risk and aggregate consumption dynamics"
  - Alisdair McKay
- "What drives heterogeneity in the marginal propensity to consume? Temporary shocks vs persistent characteristics"
  - Michael Gelman

Main Results

- The model has several sources of time-variation in idiosyncratic risks
- The paper introduces a rich income process that incorporates cyclical variation in the risks to long-term earning prospects
- Time-varying idiosyncratic risks substantially raises the volatility of aggregate consumption growth

sources of time-variation in idiosyncratic risks

- job-finding and separation rates vary
- the chances of experiencing a long-term earnings loss or long-term earnings gain vary
- average size of long-term earnings losses and gains vary over time with a risk factor x_t

Model

- individual

$$\mathbb{E}_0 \sum_{t=0}^{\infty} \beta^t (1-\omega)^t \frac{C_t^{1-\gamma}}{1-\gamma}$$

- individual's decision problem

$$V(A, \theta, m, S) = \max_{K' \geq 0} \left\{ \frac{(A-K')^{1-\gamma}}{1-\gamma} + \beta(1-\omega)\mathbb{E}\left[V\left(A', \theta', m', S'\right) \right] \right\}$$

$$\text{s.t. } A' = R\left(S'\right) K' + \left(1-\tau\left(S'\right)\right) W\left(S'\right) e^{(1-b^y)(\theta+\eta'+\xi')} n\left(m'\right)$$

$$S \equiv \{z, \lambda, \zeta, x, \Gamma\}$$

- law of motion for the aggregate state

$$
\begin{aligned}
z' &= \rho_z z + \epsilon'_z \\
\hat{\lambda}^{s\prime} &= (1-\rho_\lambda)\,\hat{\lambda}^{s*} + \rho_\lambda \hat{\lambda}^s + \epsilon'_\lambda \\
\hat{\zeta}' &= (1-\rho_\zeta)\,\hat{\zeta}^{*} + \rho_\zeta \hat{\zeta} + \epsilon'_\zeta \\
x' &= \rho_x x + \epsilon'_x
\end{aligned}
$$

- law of motion for the distribution of idiosyncratic states

$$\Gamma' = H_\Gamma(S, \zeta', \lambda')$$

Main Results

- persistent characteristics
- temporary income shocks
- the relative importance of circumstances and characteristics in explaining MPC heterogeneity

Model

$$V\left(x_{it}\right)=\max_{a_{it+1}}\left\{u\left(c_{it}\right)+\beta_i\mathbb{E}\left[V\left(x_{it+1}\right)\right]\right\}$$

$$\text{s.t. } x_{it+1}=\left(1+r\right)\left(x_{it}-c_{it}\right)+y_{it+1}$$

$$V\left(x_{it}\right)=\max_{a_{it+1}}\left\{u\left(x_{it}-\frac{a_{it+1}}{1+r}\right)+\beta_i\mathbb{E}\left[V\left(a_{it+1}+y_{it+1}\right)\right]\right\}$$

Thanks!