

DISCUSSION OF
INFERRING LABOR INCOME RISK FROM
ECONOMIC CHOICES
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SUMMARY

Research design:

- ▶ Income processes differ in implications for consumption.
- ▶ Use consumption decisions to “back out” income process.
- ▶ Economic choices are a window into agent’s info. set.
- ▶ Structural model estimated with indirect inference.

SUMMARY

Key model elements:

- ▶ HIP income process:
 - ▶ $y_t^i = g_t + \alpha^i + \beta^i t + z_t^i + \varepsilon_t^i$.
- ▶ Learning:
 - ▶ Partial prior information about β
 - ▶ Kalman filtering problem
- ▶ Borrowing constraint:
 - ▶ Borrowing capacity peaks in middle age.

Information used in estimation:

- ▶ Estimated coefficients of dynamic response of C and Y .
- ▶ Wealth-to-income ratio.

SUMMARY

Results:

- ▶ Substantial variation in profiles across people.
- ▶ Individuals appear to know profile (little prior uncertainty).
- ▶ Model does quite well at generating age-inequality profiles.

Example of usefulness of structural estimation for bringing disparate data to bear on a problem.

SOME QUESTIONS

What would happen if model were estimated with $\sigma_\beta = 0$?

- ▶ How would fit of auxiliary model deteriorate?

Complexity of learning may be barrier to adoption. What happens without learning?

- ▶ We see that parameter estimates don't change much.
- ▶ Can we still get age-inequality profiles for C ?
- ▶ Does C track Y over the life-cycle as in data?
- ▶ What role is borrowing constraint playing here?

THE BIGGER QUESTION

Economic mechanisms that drive income process are fundamental for implications of het. agent macro.

Careful documentation of facts is crucial? [What are we trying to explain? Guidance for theory.]

Ultimately we need to know mechanisms and incentives.

Topic for discussion:

- ▶ where is HIP coming from?

WHAT ROLE FOR HUMAN CAPITAL?

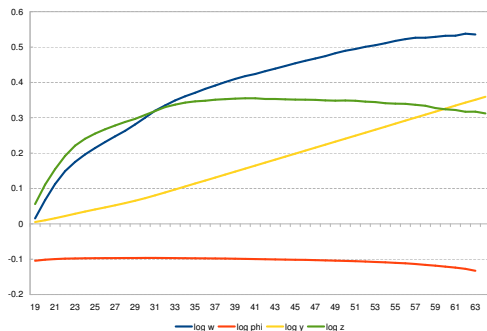
Some results from Huggett et al. (2007):

- ▶ 60 to 70% of variation in lifetime earnings driven by initial conditions (learning ability, initial wealth and initial human capital).
- ▶ differences in initial human capital are the most important factor.

What drives initial human capital?

WHAT ROLE FOR JOB SEARCH?

Search literature has investigated role of job search in age-earnings profile. [Bagger et al. (2007), Menzio et al. (2010)]



WHAT ROLE FOR JOB SEARCH?

These papers have implications for heterogeneity of profiles.

Bagger et al. (2007): one can jump straight to the top of the ladder in two periods or remain near the bottom.

Menzio et al. (2010): one will climb one rung at a time, but agents differ in how long they spend on each rung.

Structural models link data on worker flows to earnings dynamics.

WHAT ROLE FOR FINANCIAL MARKETS?

Different income profiles could reflect optimal choices give different financial constraints.

More educated workers have steeper income profiles: ability to finance school = ability to finance consumption?

If lenders know you have good income prospects, may be more willing to lend.

Financial shocks could generate differing needs to work when older.

WRAPPING UP

Mechanisms behind inequality over the life-cycle are important for understanding implications of het. agent models.

Careful documentation of nature of process is a good place to start.