

DISCUSSION OF "DEBT CONSTRAINTS AND EMPLOYMENT" BY KEHOE, MIDRIGAN, AND PASTORINO

Pedro S. Amaral

Banco de Portugal
Federal Reserve Bank of Cleveland

8th Banco de Portugal Conference on Monetary Economics
11-13 June, 2015

MAIN CONTRIBUTIONS

- KMP put some theoretical meat and bones under Mian and Sufi's empirical findings
- The key drivers are:
 - Backloaded earnings (through HK growth)
 - Higher discount rates from tightening debt constraints
- Intuition: when earnings come late in one's career an increase in discounting lowers expected discounted surplus disproportionately

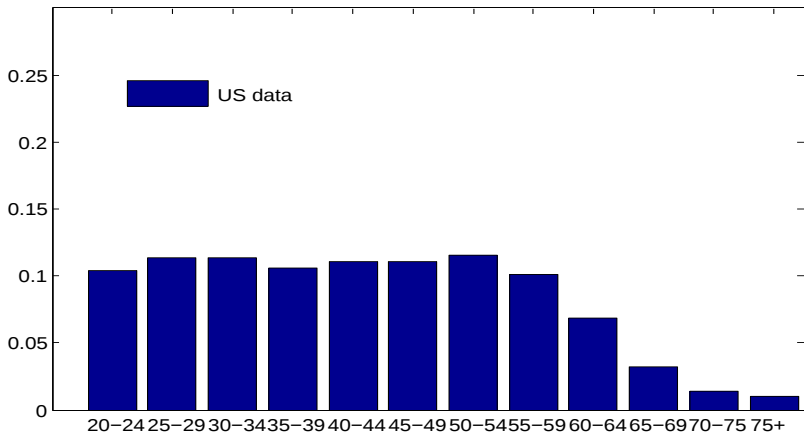
BACKLOADING WAGES

- Backloading compensation may be an appealing feature even outside of HK accumulation:
 - Burdett and Coles (ECTA 2003): backloading insures against on the job-search
 - Deferring compensation to induce effort
 - If firms have higher discount rates

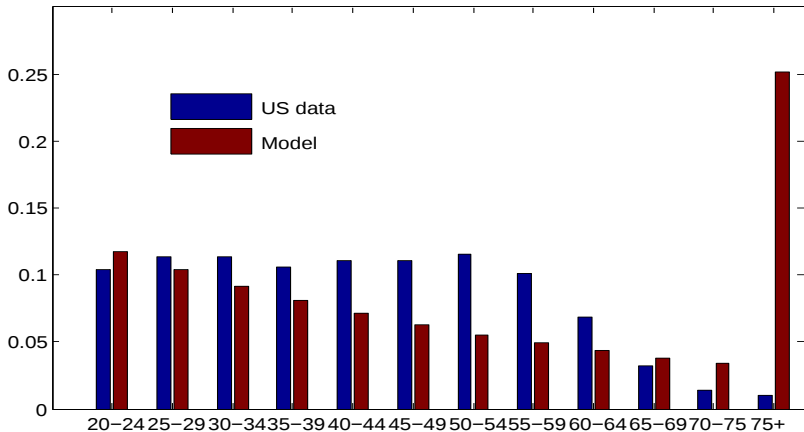
A PERPETUAL YOUTH ECONOMY

- Data-like earnings-profile is crucial for argument
- Life-cycle issues can be complicated to model
- Perpetual youth assumption makes things tractable
- No need to keep track of age
- But age distributions are off – Malthusian economy

LABOR FORCE EXPERIENCE DISTRIBUTION



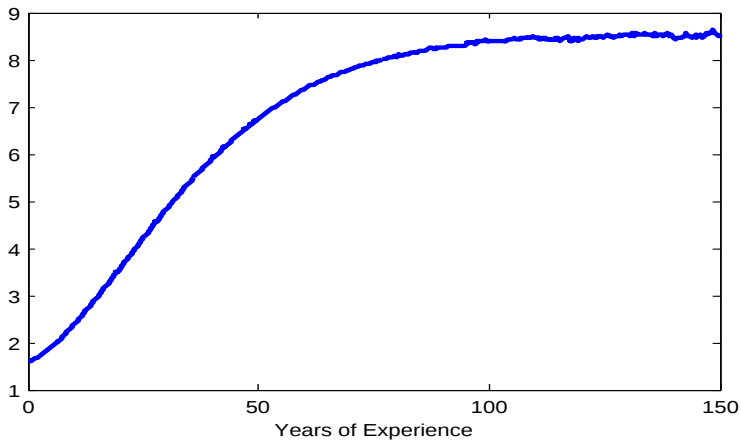
LABOR FORCE EXPERIENCE DISTRIBUTION



A PERPETUAL YOUTH ECONOMY

- Does it matter, though?
 - Model has more experienced people than data
 - Buchinsky et al. (2010) obtain returns to experience that are the highest in the literature
- As a consequence, the earnings-age profile is still steep well into one's grave years

EARNINGS-AGE PROFILE



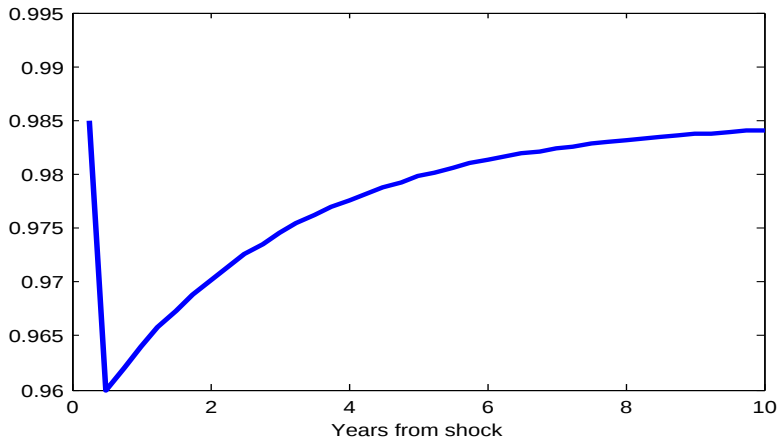
A PERPETUAL YOUTH ECONOMY: CONSEQUENCES

- Does it matter, though?
 - Model has more experienced people than data
 - Buchinsky et al. (2010) obtain returns to experience that are the highest in the literature
- As a consequence, the earnings-age profile is still steep well into one's grave years
- This raises two potential problems: calibration and magnitude of discounting effects

DISCOUNTING EARNINGS

- Consider discounting the earnings-age profile at different factors:
 - a constant one: 0.985, and
 - a variable one built to replicate the one resulting from the shock

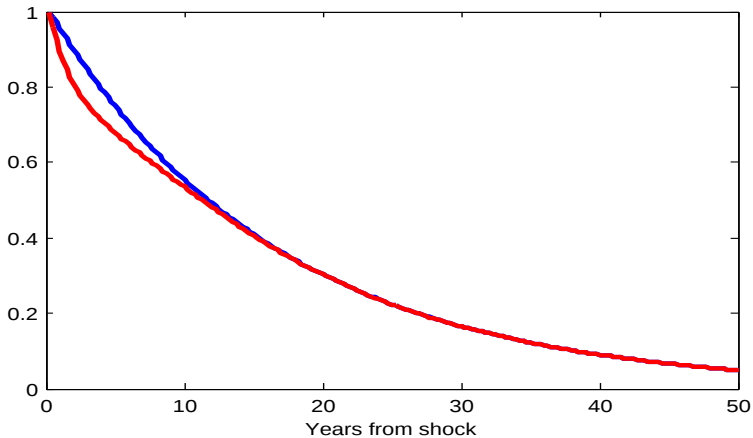
DISCOUNT FACTOR FOLLOWING SHOCK



DISCOUNTING EARNINGS

- Consider discounting that earnings profile at different factors:
 - a constant one: 0.985, and
 - a variable one resulting from the shock
- Under perfect foresight, discount profiles differ for roughly 10 years

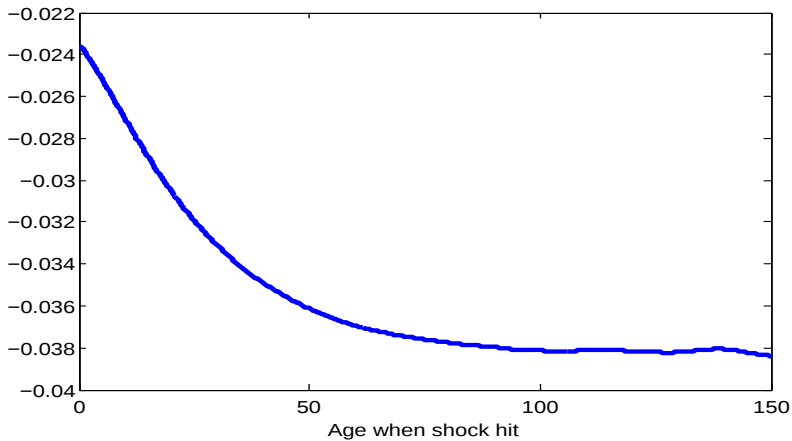
DISCOUNT FACTOR PROFILES



DISCOUNTING EARNINGS: A SURPRISE

- The percentage loss in discounted earnings increases with how old workers were when shock hit
- Totally counterintuitive!

LOSSES IN DISCOUNTED EARNINGS



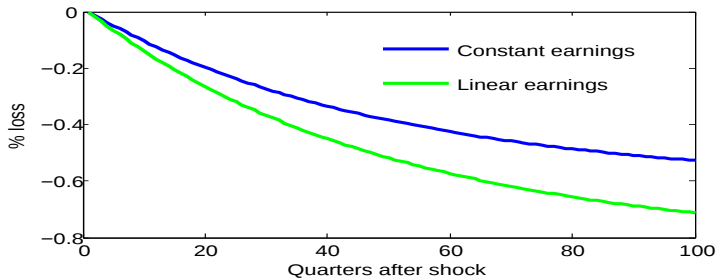
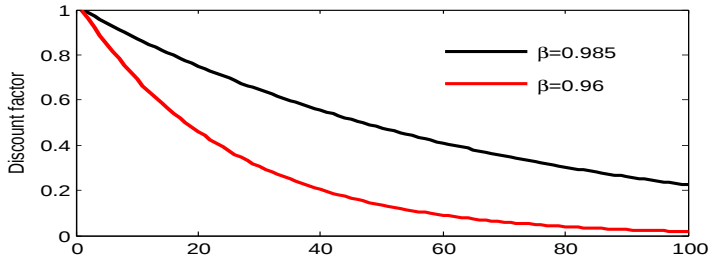
DISCOUNTING EARNINGS: QUESTIONS

- The percentage loss in discounted earnings increases with how old workers were when shock hit
- Totally counterintuitive!
- This may be problematic as the old are over-represented
- The mean loss in the model is -3.2% and the mean loss under a replica of the U.S. labor force distribution is -3%.

DISCOUNTING EARNINGS: QUESTIONS

- But that still leaves us with two questions:
 - ① How come the intuition that losses from an increase in the discount rate are higher under increasing wage profiles is incorrect?
 - It is correct for constant discount rates

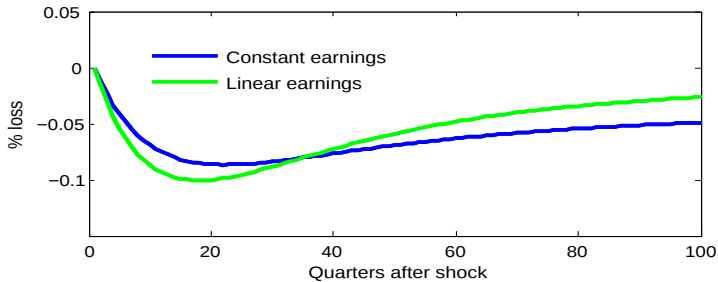
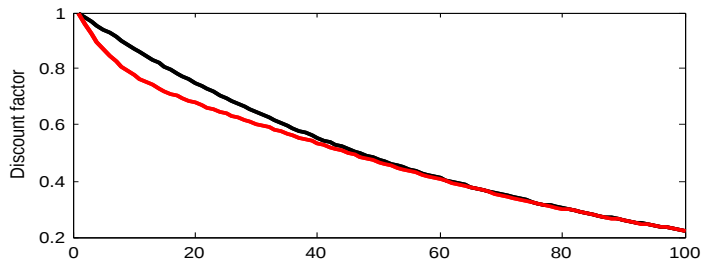
DISCOUNT FACTOR PROFILES



DISCOUNTING EARNINGS: QUESTIONS

- But that still leaves us with two questions:
 - ① How come the intuition that losses from an increase in the discount rate are higher under increasing wage profiles is incorrect?
 - It is correct for constant discount rates
 - But not for time varying ones

DISCOUNT FACTOR PROFILES



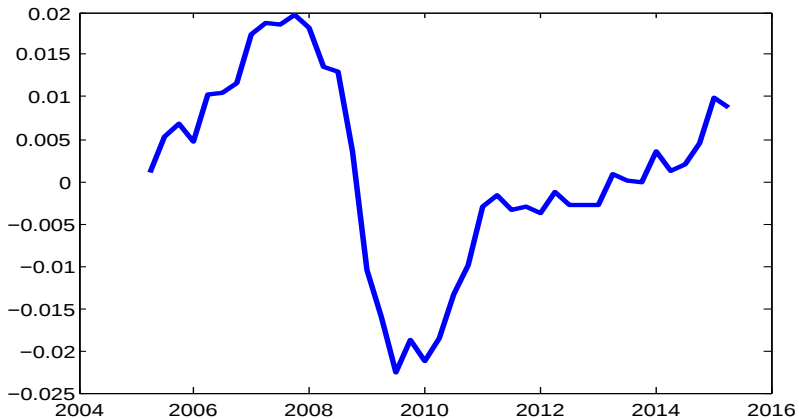
DISCOUNTING EARNINGS: QUESTIONS

- But that still leaves us with two questions:
 - 1 How come the intuition that losses from an increase in the discount rate are higher under increasing wage profiles is incorrect?
 - It is correct for constant discount rates
 - But not for time varying ones
 - 2 Where are the results coming from then? I conjecture that from changes to the wage policy (and the consequent changes to surpluses)

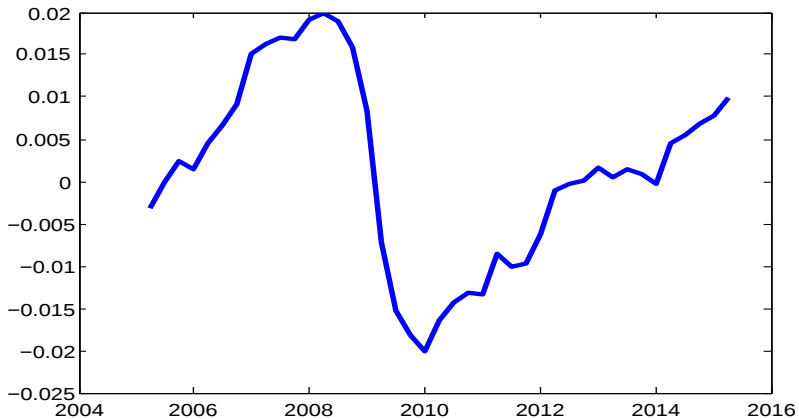
CALIBRATION

- Why calibrate to employment to working-age population? You have a counterfactually low steady-state job-finding rate
- Given model demography and your average wage growth target, your early wage growth is too high
- Buchinsky et al (2010) have estimates by education level. The coefficients for experience vary substantially. Not clear what is used.
- Floden and Linde's (2001) estimates for the standard deviation of temporary shocks are *yearly*
- Concern that estimates of standard deviation of initial log wages not purged from sources of variation not present in the model.

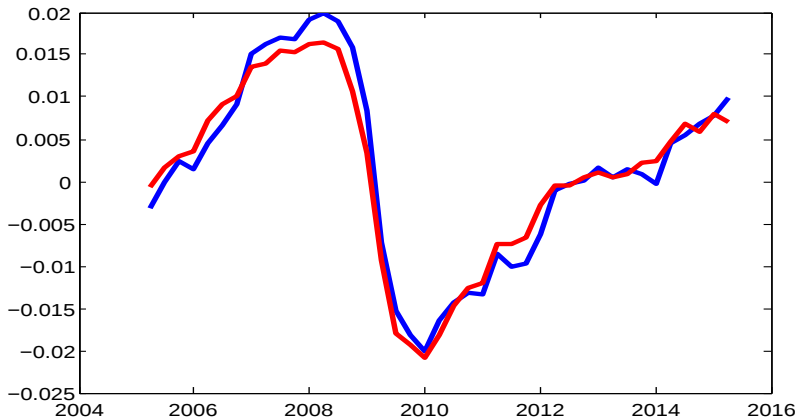
CONSUMPTION (HP)



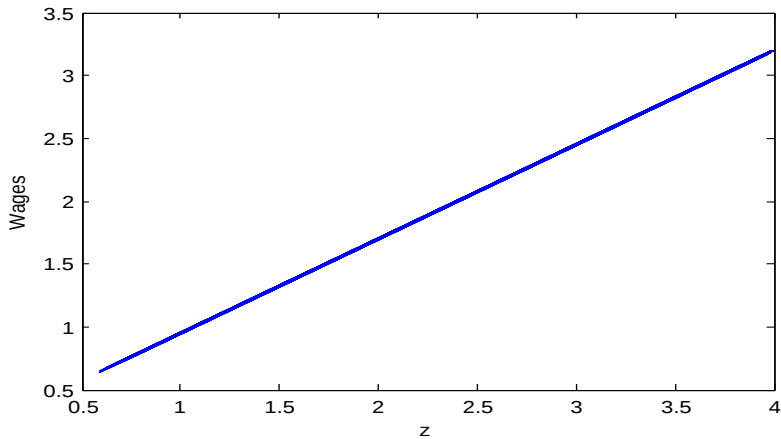
EMPLOYMENT TO WAP (HP)



EMPLOYMENT RATE (HP)



WAGE POLICY



DISTRIBUTIONS

