

Perceived Income Risks

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Outline

- 1 Motivation
- 2 Stylized facts
 - Cross-sectional pattern of subjective income risks
 - Correlation with stock market returns
 - Perceived risks and economic decisions
- 3 Model (work in progress)
- 4 Conclusion

Motivation

- dddddddddd

This paper's agenda

- 1 dddd

Literature

- ddddd
 - dddd

Data

Table: Survey of Consumer Expectations

Time period	2013M6-2018M6
Frequency	monthly
Sample size	1,300
Density variable	1-yr-ahead earning growth (same position/hours)
Pannel structure	stay up to 12 months
Demographics	educ, income, age

- density estimation following (?)
- exclude top and bottom 5% values for forecast errors and uncertainty

Definitions

- Moments:
 - expected growth, $\bar{\Delta}_i(y_i)$
 - variance: $\bar{\sigma}_i^2(\Delta y_i)$
 - skewness: $\text{skew}_i(\Delta y_i)$
- Nominal can be converted into real using forecast uncertainty of inflation
 - $\bar{\sigma}_i^2(\Delta y^r) = \bar{\sigma}_i^2(\Delta y^n) + \sigma_i^2(\pi)$
- Also, can be adjusted with perceived unemployment risk. So the perceived risk of same job/hour is just a lower bound for income risk.

Outline

1 Motivation

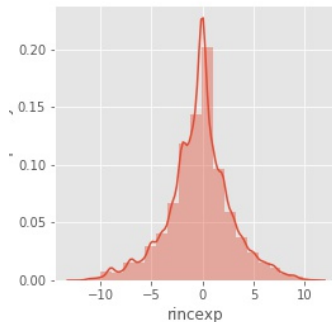
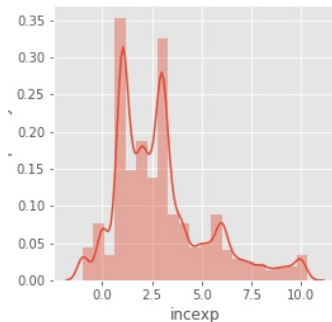
2 Stylized facts

- Cross-sectional pattern of subjective income risks
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- Perceived risks and economic decisions

3 Model (work in progress)

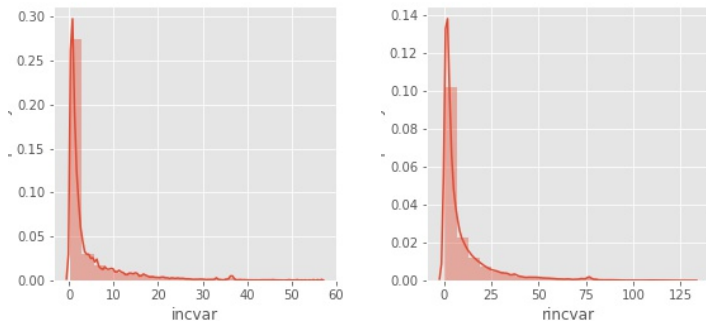
4 Conclusion

Cross-sectional distribution of expected income growth



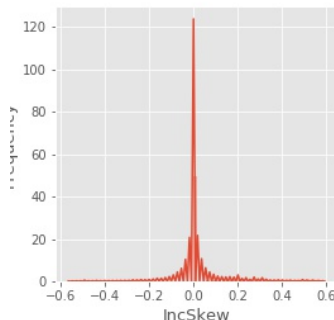
- Nominal rigidity can be seen from the expected nominal earning growth, while real expected growth become symmetric

Cross-sectional distribution of income risks



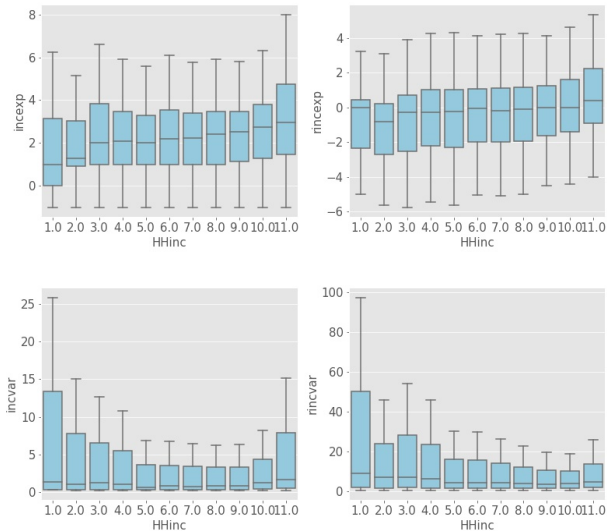
- average perceived income risks: 3% standard deviation for nominal and 4% standard deviation for real income
- just a lower bound: before adjustment of unemployment risk

Cross-sectional distribution of income risks

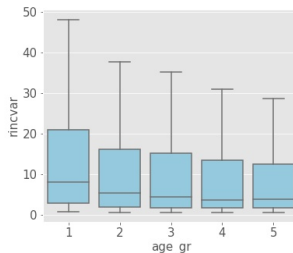
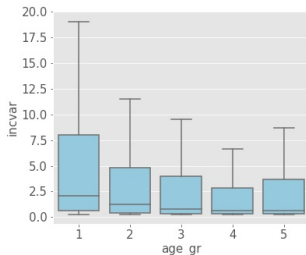
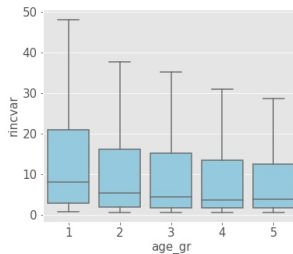
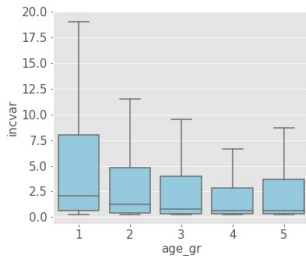


- sizable dispersion in skewness, i.e. about half of the people have non-zero skewness in perceived income distribution.

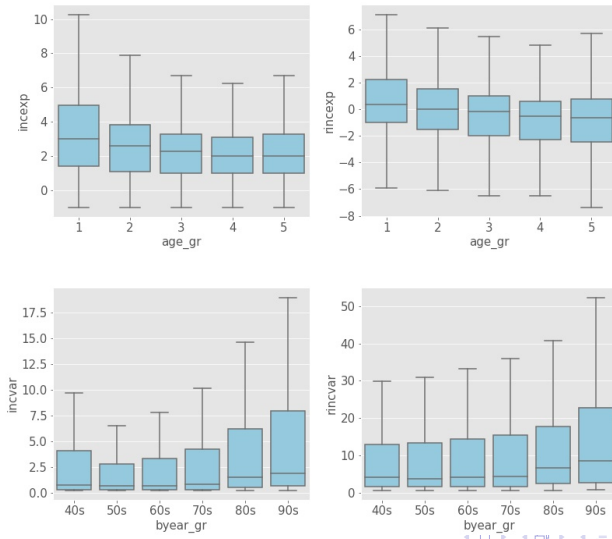
Perceived income risks by household income



Perceived income risks by age



Perceived income risks by generation



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Model ingredients

- ① imperfect understanding of the income process, a deviation from rational expectation benchmark.
 - experience-based learning capturing the cross-generatio and age-dependence income perceptions
- ② finite-period life cycle with a constant probability of death
- ③ uninsured idiosyncratic risks and aggregate risks, workhorse assumption of the HANK literature
- ④ single asset, i.e. no distinction between liquid and illiquid assets

Intuitions behind the model mechanisms

- imperfect understanding → heterogeneous perception of risks
uninsurance of risks → difference in precautionary motives and MPCs across populations → potential amplification of aggregate MPC.

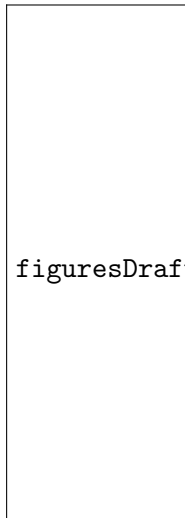
Some Table Results

Table: SMM Estimates of SE: professionals

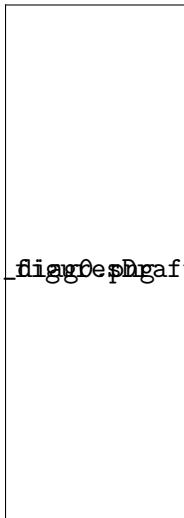
- λ : update rate in SE

Some Figures

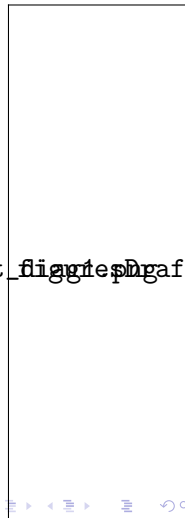
(a) FE



(b) Disg



(c) FE/Disg



Conclusion

- ddddd

Density estimation and robustness of my results

- ddd