

# Earnings Dynamics in Germany

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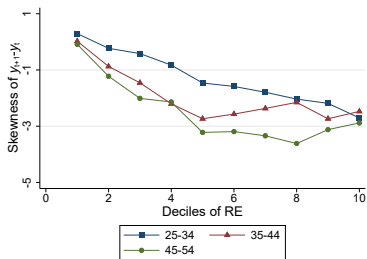
Bundesbank Household Finance Conference 2021

- Explore tax data (Taxpayer Panel)
- Focus on working age males
- Address three questions related to earnings dynamics

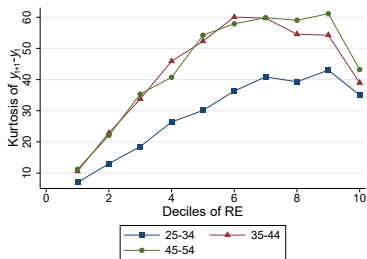
- Explore tax data (Taxpayer Panel)
  - Focus on working age males
  - Address three questions related to earnings dynamics
1. **How does the distribution of earnings changes depend on age and income level?**
  2. **How does the persistence of earnings changes depend on their sign, size, and income level?**
  3. **How much insurance do families and the welfare system provide?**

# Distribution of Earnings Changes

Figure 1: Third and Fourth Moments of One-Year Earnings Changes



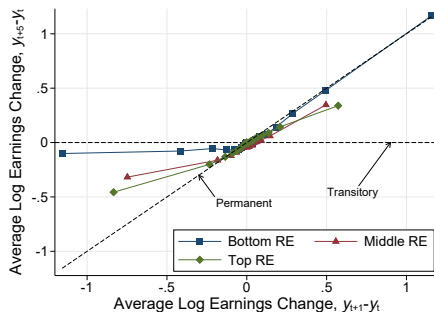
(a) Skewness



(b) Kurtosis

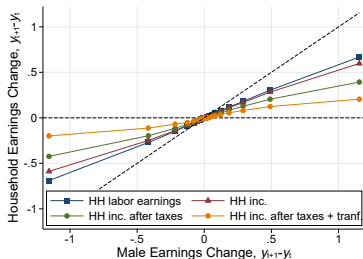
- The distribution is negatively skewed and has excess kurtosis
- More skewed and higher kurtosis for older and richer
- Distribution of hours and wages are also skewed and leptokurtic

Figure 2: Persistence of Five-Year Labor Earnings Changes



- Positive changes are mostly permanent
- Negative changes are transitory for the bottom and permanent for the top workers

Figure 3: One-Year growth of Household Income



(a) Bottom RE Deciles



(b) Top RE Deciles

- Income pooling attenuates the impact of individuals changes at the household level
- The welfare system provides significant insurance to the bottom workers

- Earnings changes feature strong deviations from normality and linearity
- Find rich earnings dynamics over the life-cycle and income distribution
- Bottom earners receive significant insurance from the welfare system
- Family and government insurance can attenuate deviations from normality and state-dependencies

**Thank you!**

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