

# Report on “Age-specific Rise of Income and Consumption Inequality”

March 25, 2013

The paper looks at the rise in income and consumption inequality in the US, by age and education. It documents that inequality has risen more strongly for younger cohorts, and that this is mainly driven by lower education groups. The paper states that these patterns are consistent with skill-biased technical change and heterogenous learning ability. It then proposes a new way to predict the age-specific variance of log wages by including an interaction term between year dummies and age. This approach is shown to result in a better fit between predicted and actual variance than the traditional methods.

I do not see a significant contribution in the paper. The facts have been documented before. The longitudinal development of the age-specific rise in the variance of log wages has been reported by Card and Lemieux (2000). Lemieux (2006) focuses on residual wage inequality, within age and education groups. Since wages are the main component of household income, I am not surprised to see the same pattern in income. That the pattern is weaker when one looks at consumption is documented in Storesletten et al. (2000). The cross-sectional pattern that inequality increases with age has been documented by Storesletten et al. (2000) and Heathcote et al. (2010), among others. The competing explanations for these patterns have also received a lot of attention, nicely summarised in Lemieux (2006) and Lemieux (2008).

I see a problem in the way the new approach to predicting the variance of log wages is compared to the traditional methods. First, I do not think statistical comparisons help in the fundamental problem of whether year or cohort dummies are the right regressors. The assumptions about the underlying data generating process are fundamentally different (Heathcote et al., 2005). It is a different look at the data. Second, if one takes the year perspective, it would be straightforward to test the inclusion of year-specific age effects by an F-test. However, the model likely contradicts itself, since the age effect is modeled nonparametrically (age dummies) and linearly (interaction terms) in the same specification. I would be surprised if the age dummies were consistent with a linear effect. Looking at Figure 2 or Storesletten et al. (2000)’s Figure 1, the age effect does not seem linear. If we desire a truly nonparametric estimation we are back at the fundamental problem of disentangling age, cohort and time effects.

## References

- Card, D. and T. Lemieux (2000, April). Can falling supply explain the rising return to college for younger men? a cohort-based analysis. Working Paper 7655, National Bureau of Economic Research.
- Heathcote, J., F. Perri, and G. L. Violante (2010). Unequal we stand: An empirical analysis of economic inequality in the united states, 1967-2006. *Review of Economic Dynamics* 13(1), 15 – 51. Special issue: Cross-Sectional Facts for Macroeconomists.
- Heathcote, J., K. Storesletten, and G. L. Violante (2005). Two views of inequality over the life cycle. *Journal of the European Economic Association* 3(2-3), 765–775.
- Lemieux, T. (2006). Increasing residual wage inequality: Composition effects, noisy data, or rising demand for skill? *American Economic Review* 96(3), 461–498.
- Lemieux, T. (2008). The changing nature of wage inequality. *Journal of Population Economics* 21(1), 21–48.
- Storesletten, K., C. I. Telmer, and A. Yaron (2000, November). Consumption and risk sharing over the life cycle. Working Paper 7995, National Bureau of Economic Research.