Does worker's experience matter for Russian growth?

Ilya B. Voskoboynikov HSE University ivoskoboynikov@hse.ru

Evgenia M. Chernina HSE University

Vladimir E. Gimpelson HSE University

The paper contributes to the literature on the contribution of human capital to economic growth (see, e.g., Bailyet al. 2021), using recent developments in understanding its heterogeneity (Lagakoset al. 2006). Specifically, the paper focuses on the decomposition of the repeated cross-sectional and age-earnings data of wages into experience, cohort, and time contributions (ECT). The experience effect captures human capital accumulation over the life cycle, the cohort effect captures inter-productivity growth (relative human capital level of a cohort of workers at the time when they enter the labor market), and the time effect captures changes in the rental price of human capital.

The literature on the impact of human capital on growth is huge. It uses multiple concepts of human capital, mostly related to returns to education, which traces back to the Mincer equation. The impact of human capital on growth is heterogeneous and depends not only on demographic patterns and educational attainment but also on differences in productivity of different generations (cohorts) and patterns of experience accumulation.

Explaining differences in growth between the United States and China, Fang and Qiu (2021) compare the composition of human capital contribution. They suggest a framework, which combines the ECT approach with a simple growth accounting framework (e.g. Fernald 2014). They show that the age-specific earnings grew drastically in China, but stayed almost stagnant in the United States. They find also that the cohort remains stagnant in the United States, but starts growing with generations of Chinese workers, who entered the labor market since the late 1970s, the beginning of a gradual transition from plan to market, it is interesting to look at a similar decomposition of another large post-socialist economy, Russia. We use data from the RLMS-HSE household survey covering 2000-2019 years and apply a procedure suggested by Lagakos et.al. (2018) to disentangle the EPC effects. Then, using basic growth accounting framework (e.g. Fernald 2014) and Russia KLEMS data we calculate contributions of each of these effects to Russian growth. Our study could shed new light on the nature of the transformational recession, differences in the impact of gradual (China) and shock therapy transition (Russia), and the role of institutions in the process of experience accumulation.

Keywords: age-earnings profiles, human capital, growth accounting, Russia, college wage premium

JEL: E24, J24, J31, O47

Literature

Baily, Martin Neil, Barry P. Bosworth, and Kelly Kennedy. 2021. "The Contribution of Human Capital to Economic Growth. A Cross-Country Comparison of Germany, Japan, and the United States." Economic Studies at Brookings. https://www.brookings.edu/wp-content/uploads/2021/09/20210928_BailyBosworthKennedy_Returns_to_education_final.pdf.

Fang, Hanming, and Xincheng Qiu. 2021. "Golden Ages': A Tale of the Labor Markets in China and the United States." In 4th IZA/Higher School of Economics Workshop: Thirty Years after the Fall of the Iron Curtain: The Contribution of Labor Market Adjustment to Transition and Convergence.

https://www.xinchengqiu.com/publication/golden_age/golden_age.pdf.

Fernald, John G. 2014. "A Quarterly, Utilization-Adjusted Series on Total Factor Productivity." 2012–19. Working Papers. Federal Reserve Bank of San Francisco. https://www.frbsf.org/economic-research/files/wp12-19bk.pdf.

Heckman, James J., Lance J. Lochner, and Petra E. Todd. 2006. "Earnings Functions, Rates of Return and Treatment Effects: The Mincer Equation and Beyond." In Handbook of the Economics of Education, edited by E. Hanushek and F. Welch, 1:307–458. Handbooks in Economics 26. Elsevier. https://doi.org/10.1016/S1574-0692(06)01007-5.

Lagakos, David, Benjamin Moll, Tommaso Porzio, Nancy Qian, and Todd Schoellman. 2018. "Life Cycle Wage Growth across Countries." Journal of Political Economy 126 (2): 797–849. https://doi.org/10.1086/696225.