Cohort Size Effects on the German Wage Distribution

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Abstract

Economic theory predicts a negative impact of cohort sizes on wages. Due to population aging young workers become relatively scarce in the German labor force. Under the assumption of imperfect substitutability of workers of different ages this should result in a relative decrease in older workers’ wages (e.g. Welch, 1979; Wright, 1991; Fertig et al., 2009). Consequently, changes in the age composition of the work force are expected to affect the steepness of individual age earnings profiles.

Germany provides an eminent case study for analyses of the economic consequences of population ageing. During the past decades Germany experienced a remarkable decline in birth rates as well as an increase in life expectancy due to declining child and old-age mortality rates. According to the Federal Statistical Office (2006), Germany will soon have one of the highest shares of older people of all industrialized countries.

This paper estimates the effect of cohort sizes on wages using data from the German Socio-Economic Panel and the German Federal Statistical Office. Cohort size effects are separated from period and age effects by including year and age fixed effects in the regressions. Cohort size effects are estimated at different points of the wage distribution using unconditional quantile regressions. The resulting coefficient estimates are insignificant for males and negative for females at the mean and the lower part of the wage distribution.

JEL-Classification: J11, J31, D31

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