Regional Distribution and Dynamics of Human Capital in China 1985-2014:
Education, Urbanization, and Aging of the Population

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Given the challenges in quantifying the role of human capital on economic development, measuring human capital itself becomes an important issue. In order to go beyond the traditional partial human capital measures based on education attainment, it is desirable to have a comprehensive human capital measure that is ready to use but yet relatively simple to be obtained. In this study, we apply the Jorgenson-Fraumeni (J-F) human capital measurement framework and modified it to estimate provincial level human capital in China. As a result, we produced a provincial level panel dataset from 1985 to 2014, with various J-F based and traditional human capital measures, as well as physical capital estimates, for each province. The new human capital estimates can be disaggregated based on education, age, gender and urban or rural location. Additionally, by combining the provinces into four different regions that are at different stages of economic development, we discuss the regional pattern and trend of human capital and their correlation with other economic indicators such as Gross Domestic Product and physical capital. Moreover, we conducted a detailed Divisia decomposition analysis to investigate the contribution of different factors, such as education, urbanization, population aging and gender composition, on the quantity and quality growth of human capital in each region.

Key Words: lifetime income, Jorgenson-Fraumeni, Divisia quantity index.