

論文の要旨

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論文題目

Applied Dynamic Analysis on Labor and Social Welfare: for Predicting Condition and Environment of Labor Market, Social Security System and Economic Growth in China

(労働と社会福祉の応用動学分析: 中国の労働市場、社会保障制度および経済成長に対する展望)

論文の要旨

The aim of this dissertation is to study the implications of labor market and social security system on the process of economic development, and to predict the future economic growth of China.

This dissertation starts with a survey of labor market and social security system of China in Chapter 1. We conclude that there is an expanding labor market reflected in an increasing total number of employment. Although the China's unit labor productivity grows rapidly, the absolute level is obviously lower than the average level of the world. The relative productivity by industry presents convergent tendency. The segmentation between rural sector and urban sector prevents the labor mobility, which reduces the efficiency of labor resource reallocation and thereby decreased the TFP. Under the background of population aging, there are potential negative effects on economic growth due to the shortage of labor supply and high aging dependency ratio. Apart from relaxing the institutional regulations, improving the labor competence by investing the

human capital to meet the demand of industrial optimization and upgrading should be considered.

On the other hand, in the last decade, the social security undertaking in China has developed rapidly, which embodied in the perfection of corresponding laws and the coverage expansion of beneficiary, especially the establishment of social security programs for rural area population. However, the coverage and the level of social security is relative low compared internationally. Moreover, the regional inequality of social security level, which is also brought by the institutional regulations, exacerbates the labor market segmentation and leads to negative effects on economic development. Population aging generates an increasing demand of long-term care for elderly people, and the relevant social security system is absent.

To build up a nationally long-term care insurance (henceforth LTCI) system, the factor that the imbalance economic development among regions should be considered. In order to provide policy guideline for China, chapter 2 focuses on the experience of LTCI system in Japan. We give an analysis on the dynamic properties of regional differences of the Japanese LTCI system. We also investigate the effect of the government-oriented reform for the “expanding cost” problem and the “large regional differences” problem of LTCI system. First, we predict that each region’s user rate converges to a unique globally stable steady state by employing a simple theoretical model. The convergence, however, could be conditional, i.e., each region’s user rate may converge to a region-specific steady state which is determined by the region’s parameters.

We also calculated the user rates of 47 Japanese regions (prefectures) for the fiscal years between 2000 and 2012. The regional user rates seem to exhibit a tendency to conditional converge. Additionally, by using average Markov transition, we calculated

the index of standing order mobility to evaluate the effects of the 2005 reform which aimed to remedy the differences in regional figures of LTCI system. It turned out that the 2005 reform, did not seem to alleviate the standing order inertia.

Moreover, the small degree of variation in the standing order suggests the existence of region-specific factors. With the help of preceding researches, we chose 3 factors {the certification rate, the late-stage (75 years or older) old age ratio, and the ordinary balance rate} to account for the regional differences in user rates, and recalculated the mobility index by using the residuals. It turned out that the degree of mobility is improved and thus the convergence is conditional. If region-specific factors were not removed, each region's user rate would converge to region-specific steady state, and the standing order of regional user rate would be invariant. It turned out as well that the 2005 reform hardly affected the standing order mobility of residual user rates. In addition, the analysis also revealed that the improvement in the standing order variation seems small even after the regional factors are removed. Therefore, there might be factors other than our choice that could explain the regional differences.

By comparing the regional differences between Japan and China, we provide suggestions for the establishment of Chinese LTCI.

In Chapter 3, for predicting the growth trend of China, we provide theoretical framework and show that the relative importance of learning places (home or market) matters for the process of economic development by employing the ideas of “unified economic growth theory” and “family and time allocation”.

A natural framework that can deal with these issues is a two-sector model of economic growth in which a household plans time allocation between market activity and non-market (home) activity to maximize utility. Under the assumption that home

technology is more labor intensive than the market technology (as presumed in many preceding researches), when market activity is more important for human capital accumulation, then multiple steady states emerge in dynamic general equilibrium. Some economies converge toward a higher growth steady state, while the others toward a lower growth steady state. Furthermore, the divergence may depend on initial condition and self-fulfilling expectation.

We also review the role of human capital on China's economic growth process since the reform and opening-up, and discuss the applicability of our theoretical model for predicting the future of economic growth of China.

Chapter 4 concludes and points out the shortcomings and future directions for further research.