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**ABSTRACTS****A New Contribution Mode of the Basic Endowment Insurance under the Trend of Technology Substituting for Labor***Mu Huaizhong and Du Fangyu · 2 ·*

Based on the theory of total factor productivity endowment insurance payment under the trend of technology substituting for labor, the paper proposes a “production-based” payment mode for basic endowment insurance and analyzes it empirically with a mathematic model. It finds that, according to “production-based” payment mode, the appropriate contribution rate ranges from 1.8% to 2.5% in short term, and in the long run the upper and lower boundaries switch to around 5.5% and 2.4% respectively when population aging peaks. This new mode is promising to increase total amount of endowment insurance payment, reduce contribution rate and the overall gap, promote sustainability and industry equilibrium for the main contributors. Finally, the paper puts forward some policy suggestions.

**The Influence Mechanism of Population Aging on Industrial Structure in China: Empirical Analysis Based on Synergy and Mediated Effects***Lu Jin and Others · 15 ·*

Taking data on 31 provinces from 1993 to 2015 as samples, the paper focuses on the influence of population aging on industrial structure. First, the synergy effect of population aging and population migration on the industrial structure is discussed. Five one-way influencing mechanisms of population aging on industrial structure are then tested. The study shows that population aging has a positive effect on industrial structure. Specifically, the marginal effect of population aging on industrial structure increases with the increase of population migration. Population aging accelerates the accumulation of human capital and forces companies to replace labor and material capital with technology and human capital, which are good for the upgrading of industrial structure. However, population aging reduces labor productivity and increases burden of social security, which hinders industrial upgrading. In addition, population aging promotes old-age consumption, while the aging industry is yet to be developed. The paper suggests that China should make full use of the driving forces of aging in industrial upgrading, promote the accumulation of human capital, guide orderly migration of population, increase investment in the elderly consumer market, and eventually achieve an upgraded industrial structure.

**The Space-time Effect of Internet on Migration: Analysis Based on Provincial Panel Data***Lv Zhaohe Zhai Deng · 26 ·*

Different from other technologies, Internet has an increasing marginal return in the form of technological externality which breaks the constraint of geographic distance. It is of great significance in the new era to research the space-time reconstructing effect of Internet on migration. Based on the data of population censuses and population sampling surveys from 1995 to 2015, the paper econometrically analyses the space-time effect of Internet on migration by using push-pull model of migration and spatial Durbin model. According to the two-period division by the level of Internet development, the spatial spillover of Internet became one of major factors that affected migration from 2006 to 2015. The rigid coupling constraint between industrial and population centers was relieved. Internet promotes short-distance migration, inhibits long-distance migration, accelerates the urbanization process, and benefits population agglomeration in large cities. This study puts forward policy suggestions that facilitate cross-region coordinating development and optimize the system of cities through Internet.

**A Study on the Lagging Urbanization of Elderly Population in China:****Based on International Comparisons***Lin Bao · 39 ·*

China is facing rapid population aging and urbanization, and there is lagging urbanization of the elderly population. Based on the United Nations' data on urban and rural population by age and sex from 1980 to 2015, the paper finds that urbanization of elderly population in general lags behind that of the total population in most countries (or regions) at different stages of income and urbanization. There is a linear relationship between the elderly urbanization and the total population urbanization. The urbanization of elderly population lags behind even more in China. Large-scale population migration is the main reason for China's lagging urbanization of elderly population, while the household registration system and the land reliance led by low level of social security are the major institutional factors. To understand this issue of China, it is important to take into consideration both general courses and special issues. It is vital to relieve the lagging situation and deal with the consequences.

**The Influence of Labor Outflow on Elderly Support in Urban and Rural Areas***Liu Chengbin Gao Xiang · 51 ·*

The large scale labor outflow gives rise to great risks in urban and rural elderly support. This paper uses the data of Chinese Longitudinal Healthy Longevity Survey (CLHLS) in 2014, and operationalizes the elderly support risk into three aspects, including children's economic support risk, life care risk and emotional comfort risk. This paper empirically analyses the difference between urban and rural areas in the impact of labor outflow on the risks in elderly support, and discusses its key mechanisms. The study finds that labor outflow has increased the risk of intergenerational economic support, living care and spiritual comfort for the elderly in urban areas, while it has a significant protective effect on the risk of their children's economic support for rural elderly and an aggravating effect on the risk of living care. Children's frequent visits to home provide mediating effect herein. This paper further explores specific measures to reduce the risks in elderly support in urban and rural areas.

**Exploring methods of Making Urban and Rural Life Tables in China***Li Jianxin and Others · 62 ·*

Using the national population census data in 2010 and the technique of model life table, the paper adjusts the urban and rural infant mortality with stable function established according to the inherent relation of mortality. It discusses the rationality of adjustment used in various model life tables, and compares the results with different adjustments on infant mortality. Logistic model and Kannisto model are fit to make comparison for the oldest-old mortality in urban and rural areas, and they are used to adjust for the observed values of mortality at advanced age. Finally, this study uses above mentioned methods to calculate life tables separately for males and females, in urban and rural areas, after adjusting for the mortality at infant and oldest old ages.

**Proxy Means Tests and Targeting Performance of Rural Subsistence Allowance:****Analysis Based on CHIP Data***Han Huawei Gao Qin · 73 ·*

Using the rural sample of 2013 CHIP data, the paper proposes a proxy means tests (PMT) method based on the OLS and quantile regression models. Using a rich set of targeting measures, we systematically evaluated and compared actual and PMT targeting performance of the Rural Subsistence Allowance (RSA). We found that, first, the regressions based on the PMT method all have a high level of goodness of fit. Second, the proxy indicators are all significant predictors of household per capita income. Second, RSA's PMT targeting was more accurate than its actual targeting. Third, RSA's PMT targeting performance is better when estimated for the respective eastern, central, and western samples than that for the national sample, and also better when estimated based on quantile regression model than based on OLS model for the national sample. Fourth, the PMT targeting is more effective in reducing the exclusion errors in western than that in eastern and central regions, but more effective in reducing the inclusion errors in eastern and central than that in western re-

gion. These results suggest that applying the PMT method in China's RSA contributes to the improvement of its targeting performance.

### **The Impact of Targeted Poverty Reduction Policy on Medical Burden of Rural Family**

*Ma Zhixiong Ding Shijun · 85 ·*

This paper evaluates the influence of targeted poverty reduction policy on the medical burden of rural families with major illnesses in perspective of correlation between family medical burden and gift expenses. Employing Tobit Model and Treatment Effect Model, we find that the occurrence of serious illnesses reduces gift expenses of rural families, which acts like a “wind indicator” in monitoring the medical burden of family with serious illnesses. The targeted poverty alleviation policy has a very significant effect in alleviating the medical burden for families with major illnesses, and it effectively curbs the “disease-led poverty”. The families with serious illnesses which have not entered the list of established state cards (non-impooverished households) are still more vulnerable to heavy medical burdens, and they show some vulnerability to major illnesses. For non-impooverished households, the current illness has a great impact on the family's medical burden, although it declines gradually over time. Therefore, in addition to household income per capita and property status, it is important to take into consideration of changes in gift expenditure in order to identify and target-poverty more accurately. It is also possible to monitor changes in gift expenditures and judge whether the poor households are heavily burdened with medical treatment and whether they are “disease-led poverty”.

### **Research on Disability Rate Estimation of Chinese Elderly and Its Trend**

*Ding Hua Yan Jie · 97 ·*

This paper aims to estimate disability rate of Chinese elderly and analyse its trend based on China Health and Retirement Longitudinal Study (CHARLS) panel data from two dimensions, namely activities of daily living (ADL) and instrumental activities of daily living (IADL). Results show that, in the three surveys, the disability rates are between 10.26% and 11.08% as measured with ADL. They are between 20.73% and 21.61% by IADL standard. Whether using ADL or IADL in disability measurement, the results show significant differences by gender, place of residence, marital status and educational level. The disability rate increases rapidly over time, and the proportion of moderate and severe disability have doubled in the four years since the baseline survey. The scientific estimations on the size of disabled elderly and its future trend are important for formulating a long-term elderly care policy. For more scientific adjustments on the level of disability rate, the design of measurement needs more comprehensive consideration, including cognitive ability, mental health, emotion and behaviors. In addition, the age distribution should be taken into account in relevant sampling surveys in order to produce accurate disability measurements for different age groups.

### **The Influencing Factors of Health Inequality on the Middle-aged and Elderly**

*Wang Hongliang Zhu Xingshu · 109 ·*

Based on the 2013 and 2015 micro-data from China Health and Retirement Longitudinal Study (CHRLS), this paper estimates health inequality of the middle-aged and elderly by using Wagstaff index and Erreygers index, and uses RIF-I-OLS to analyse the influencing factors of health inequality on middle-aged and elderly in terms of socio-economic status, demographic characteristics and living environment. The result shows that the health level of the middle-aged and elderly have a steady upward trend. Such factors as income, education, gender, age, married status, family size, sleeping time and region have important impacts on their health. The increase of income, education level and sleeping time are beneficial to the improvement of health condition. However, there are significant differences in health condition among people from different regions and gender. Health condition of people who live in developed areas, being male or married are better than that of their counterparts living in underdeveloped areas, female or those remaining single. Even though health inequality favoring the rich, this inequality is markedly declining. Income and sleeping time are good not only for the improvement of health condition, but also for the reduction of health inequality. The effect of education on health inequality seems to be non-linear.