[Grant-in-Aid for Specially Promoted Research]

Humanities and Social Sciences



Title of Project: Construction of Policy-Evaluation-Oriented and
Heterogeneity-Sensitive National Transfer Accounts
and their Application to Policies for Coping with
Declining Fertility and Population Aging

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Research Area: Social sciences, Economics, Economic statistics

Keyword: Statistical research, Population statistics, National accounts, Econometrics

[Purpose and Background of the Research]

The National Transfer Accounts (NTA) is a new analyzing intergenerational income tool for transfers in the conditions of rapid population aging, widely used by international organizations such as the World Bank, IMF, and the UN. It is an epoch making tool in that it captures both private and public average intergenerational income transfers at a point in time in an internationally comparable way. In the present research, we endeavor to expand the NTA so as to capture not only the average income, but also income heterogeneity (in relation to household composition, health status of household members, and socio-economic status), as well as income across the life cycle. In addition, we will create an NTA framework that can, beside income transfers, also capture intergenerational time transfers, in child-rearing or caring for the elderly parents, for example. We will also develop a framework that allows us to assess policy effects by taking into account household and firm responses to policy changes, and will use it to evaluate various policies regarding low fertility and aging.

[Research Methods]

The current NTA framework is a reduced form analysis, treating consumption and labor income as endogenous variables and age as an exogenous variable. We introduce structural models of households and firms in the NTA framework. The household structural model provides a framework for introducing heterogeneity in households, and at the same time provides a way to consider life-cycle income transfers and intergenerational time transfers. The firm structural model allows us to consider how firms substitute or complement workers with different age and how such companies react to government policies. These models are used to capture (private and public) intergenerational income and time transfers over the life cycle, and serve as a base for predicting how household and firms react to different government policies.

[Expected Research Achievements and Scientific Significance]

We will create a new NTA framework that captures how intergenerational income and time transfers vary across different types households and examines how households and firms react to different government policies. That will enable us to properly evaluate policies, such as raising the pension eligibility age and encouraging firms to employ more women and the elderly. The new framework will also allow us to clearly examine life-time income distribution, instead of simple, cross-sectional distribution. We will also introduce age-dependent price index to reflect differences in consumption content across different age groups. The planned examination of time transfers in addition to income transfers is expected to shed new light on the factors that affect female labor supply and fertility. In addition, the new data sets, the "Japanese Study on Aging and Retirement" and the "National Survey on Work and Family" that are essential for the present research, will be made publically available and are expected to be widely used by other researchers.

[Publications Relevant to the Project]

- Ichimura, H., H. Hashimoto, S. Shimizutani (2009) "JSTAR First Results: 2009 Report," RIETI Discussion Paper Series 09-E-047.
- Heckman, J., H. Ichimura, P. Todd, (1998) "Matching as an Econometric Estimator" Review of Economic Studies, 65, 261–294.

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(Budget Allocation) 417,100 Thousand Yen

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