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IARIW-Hitotsubashi University Conference on “Population Ageing: Implications for Economic Measurement and Performance” March 24-25, 2025, Tokyo, Japan

Challenges in Population Ageing and Economic Measurement

The rapid growth of the global population is the result of a decline in infant mortality and an increase in life expectancy, against a backdrop of remarkable advances in health and medical technology, especially during the last century and the present century. Supported by such population growth and technological development, some developing countries, particularly many Asian countries, are achieving high economic growth rates. On the other hand, high-income countries have been experiencing declining birth rates and ageing aging population structures, and this trend is spreading to middle-income countries as their economies continue to develop. These problems have also led to the ageing of society as a whole and have been called referred to as "Global Ageing."

The impact of demographic changes on macroeconomic activity has attracted the attention of many economists. According to the life-cycle hypothesis, shifts in the population's age structure can influence the savings rate, thus impacting economic growth through its channels. In the empirical analysis, Fair and Dominguez (1991) found that changes in the age structure of the U.S. population are closely related to changes in macroeconomic indicators such as consumption, housing investment, money demand, and labour participation. Aksoy et al (2019) who analyzed panel data for 21 OECD countries also found that population ageing has economically and statistically significant effects on economic growth, investment, savings, hours worked per capita, real interest rates, and inflation.

In what ways do these changes in the age structure affect prices, economic growth, asset formation, and investment? For example, in relation to prices, at least two theoretical explanations are possible according to the arrangement of Juselius and Takats (2021). The first is based on the idea that demographics induce a gradual movement in the natural rate of interest. The working-age population, the net saver, depresses the natural rate of interest through the supply of savings, while the elderly population and the young population, the net spenders, boost the natural rate of interest by withdrawing their savings. Krueger and Ludwig (2007) found that changes in the weight of the cohort affect the long-term supply of savings, which in turn affects the determination of the natural rate of interest. If monetary policy changes immediately in response to the natural rate of interest, the age structure cannot affect the inflation rate. However, in reality, there are institutional and cognitive lags that delay changes in the policy rate and cause unintended tightening or easing, thereby changing the inflation rate.

The second theory, based on a political economy model, holds that demographics affect voter preferences, which in turn affect the central bank's inflation target (Bullard et al., 2012). Under a model in which the elderly prefers low inflation to preserve the value of their nominal savings, and the working-age population prefers high inflation to secure higher employment, the central bank's inflation target would follow the median voter's preference for inflation. As the age structure changes, the median inflation preference changes accordingly. For example, as the population ages, the median inflation preference will decrease due to the relative size of the elderly population.

Deaton and Paxson (1994, 1997) also showed that consumption inequality increases with age within a cohort of individuals in many countries. This theory suggests that if shocks to consumption are not perfectly correlated across individuals, consumption inequality within a cohort will rise over time as the cohort ages.

Deaton and Paxson (1998) also examined how the distribution of health and income changes over the life cycle and found that health inequality increases with age. Additionally, health shocks can be both permanent and transitory. In other words, health status is nonstationary, and if health shocks are not perfectly correlated across individuals, the variance of health status increases with age. This view of health status as a nonstationary random variable is the result of the "accumulation of adverse life experiences," in which ill health is the outcome of "adverse life experiences." Naturally, such a status affects well-being of individuals.

These are just a few examples, but demographic changes, especially in a society with an increasingly ageing population, could affect not only consumption but also all areas of economic growth, asset formation, and investment. This issue is also an extremely important research topic in economic measurement, which seeks to properly account for economic activity.

If demographic changes, especially the ageing of the population, affect areas such as consumption, economic growth, asset formation, and investment, then current economic measurement must also accommodate such changes. Specifically, it is necessary to measure income, consumption, and economic welfare, considering heterogeneity by age group, and to develop statistical indices that can identify trends in these areas.

There is also a strong possibility that asset inequality will widen as the population ages. Furthermore, the impact of the ageing of society on the inflation rate is not well understood.

This special conference will focus on economic measurement issues in response to the changes in economic activity expected to arise in the ageing of the population.

Topics for Call for Papers

The field of aging covers not only macroeconomics, but also microeconomics, health economics, public economics, economic policy, data science or empirical analysis and the broad field of economic measurement. The program committee is looking for proposals for papers on the following topics:

- Ageing and its Impact on Inflation Dynamics
- Ageing and its Impact on Labor Markets
- Ageing, Digitalization, and Decarbonization
- Ageing, Productivity and Economic Growth
- Impact of Changes in Ageing on the Relative Prices of Various Goods and Services, as well as Industry Structures

- Impact of Changes in Relative Prices of Food, Energy, etc., on Inequality across Age Groups
- Income, Consumption, Wealth, and Health Inequalities among the Elderly
- Measuring Income, Consumption, and Economic Well-Being along with Trends, while Considering Elderly Heterogeneity
- Measuring the Impact of Ageing on Health
- Methods for Measuring the Impact of Ageing on the Cost of Living Quantification of Lifetime Welfare

Conference Organization

Chihiro Shimizu of Hitotsubashi University (IARIW member) will be responsible for organizing the IARIW2025 conference in collaboration with Charles Yuji Horioka of Kobe University (IARIW President-elect).

Economic and Social Research Institute (ESRI), Cabinet Office will participate as a sponsor.

The IARIW secretariat will be responsible for communications with all conference paper presenters and maintain the conference program on the IARIW website. The local organizer, Hitotsubashi University, will be responsible for the conference website, conference registration, and local arrangements. Conference expenses will be divided between the IARIW and the local organizer. The IARIW will cover expenses for paper givers from the developing world on a needs basis, and the Association will also pay for a special issue of the Review of Income and Wealth that will contain selected papers from the conference. Hitotsubashi University will cover the cost of the conference venue, meals, the excursion, and keynote speakers.

Conference Program Committee

The program committee and keynote speakers will consist primarily of experts in economic measurement but will also include experts in ageing research.

- Satoru Hagino (Chair), Cabinet Office, Statistics Commission:
- Naohito Abe, Hitotsubashi University:
- Taehyoung Cho, Bank of Korea:
- Thomas Crossley, University of Michigan:
- Erwin Diewert, University of British Columbia:
- Prasada Rao, University of Queensland:
- Chihiro Shimizu, Hitotsubashi University:
- Timothy Smeeding, University of Wisconsin:
- Yafei Wang, Beijing Normal University:

IARIW President-Elect Charles Yuji Horioka and IARIW Executive Director Andrew Sharpe will serve as ex officio members of the program committee in an advisory capacity.

The keynote speakers are Andrew Mason of University of Hawaii and David Weinstein of Columbia University. Andrew Mason co-founded National Transfer Accounts, a system of generational accounts being implemented in over 70 countries. David Weinstein is an expert on

the relationship between household consumption behavior, investment, productivity and economic measurement (price indices and national accounts). Andy will present work on sustainable consumption in aging societies and David will deliver a keynote address entitled “Aging and Its Impact on the Price Index and Productivity.”

The key activities of the program committee will be the development of the call for papers, solicitation of proposals for the conference, and evaluation of proposals for acceptance into the conference program.

Conference Program

The conference program will consist of paper sessions, keynote addresses, panels, and a farewell dinner. There will be a reception on the evening of the first day and a farewell dinner on the evening of the second day. If there are a large number of high-quality submissions, parallel sessions or a poster session may be organized. It is expected that 20-24 papers will be presented in plenary sessions. The conference will be held during the best cherry blossom season. The conference venue has a well-known Japanese garden in Tokyo, and the excursion on March 26 will include a visit to a famous cherry blossom viewing spot in Tokyo.

Conference Size

Previous IARIW special conferences have had around 100 delegates in attendance. A similar number is expected for this conference.

Conference Venue and Timing

The in-person conference is planned for March 24-25, 2025 at the International House of Japan, Tokyo, in the center of Tokyo.

ROIW Special Issue

Selected papers from IARIW special conferences are normally published in special issues of the Review of Income and Wealth (ROIW), edited by a sub-set (one or two persons) of the members of the program committee. To be considered for the special issue, paper givers must submit a revised version of their paper by a specified date after the conference, generally within three months of the conference. All submissions go through the standard ROIW refereeing process. Guest editors for this special issue are Charles Yuji Horioka and Chihiro Shimizu.

Conference Timeline

- **February 29, 2024:** Call for Papers Announced
- **July 15, 2024:** Deadline for Submitting Paper Proposals
- **September 15, 2024:** Notification of Proposal Acceptance & Preliminary Program
- **September 30, 2024:** Financial Assistance Application Deadline
- **October 15, 2024:** Notification of Financial Assistance Awards
- **February 28, 2025:** Final Paper Submission Deadline
- **March 24-25, 2025:** Conference
- **March 26, 2025:** Post-Conference Excursion

- **March 27-28, 2025:** World KLEMS Conference
- **June 30, 2025:** Deadline for ROIW Special Issue Submissions
- **Second Half of 2026:** Publication of the Special Issue

References

- Aksoy, Y., Basso, H. S., Smith, R. P., and Grasl, T. (2019). Demographic structure and macroeconomic trends. *American Economic Journal: Macroeconomics*, 11(1):193–222.
- Bullard, J., Garriga, C., Waller, C. J., et al. (2012). Demographics, redistribution, and optimal inflation. *Federal Reserve Bank of St. Louis Review*, 94(6):419–39.
- Deaton, A.S., and C. H. Paxson. (1994). Intertemporal choice and inequality. *Journal of Political Economy* 102:437-67.
- Deaton, A.S., and C. H. Paxson. (1997). The effects of economic and population growth on national saving and inequality. *Demography* 34:97-114.
- Deaton, A.S., and C. H. Paxson. (1998). Aging and Inequality in Income and Health, *The American Economic Review*, Vol. 88, No. 2, Papers and Proceedings of the Hundred and Tenth Annual Meeting of the American Economic Association (May, 1998), pp. 248-253
- Fair, R. C. and Dominguez, K. M. (1991). Effects of the Changing U.S. Age Distribution on Macroeconomic Equations. *American Economic Review*, 81(5):1276–1294.
- Juselius, M. and Takats, E. (2021). Inflation and demography through time. *Journal of Economic Dynamics and Control*, 128:104136.
- Krueger, D. and Ludwig, A. (2007). On the consequences of demographic change for rates of returns to capital, and the distribution of wealth and welfare. *Journal of Monetary Economics*, 54(1):49–87.