# **ABSTRACTS\***

Kyoto University Faculty of Economics

The 100th Year Anniversary International Conference Series

"Economic Growth and Income Distribution:

Facing Real Economy Beyond Schools"

\*Listed in order of presentation

# Kazuo Mino\* (Doshisha University)

#### "Public Debt and Economic Growth with Financial Frictions"

#### **Abstract**

This paper examines the relation between accumulation of public debt and long-run economic growth. We construct an endogenous growth model in which heterogeneous firms are subject to financial constraints on their investment. In our model, the government bond serves as a collateral for the firms, so that it has a crowed-in effect in the sense that a higher level of public debt may enhance production activities. We inspect the relationship between debt-GDP ratio and the long-run growth rate of income to show that profiles of the linkage depend not only on the magnitudes of key parameters involved in the model but also on the fiscal rules adopted by the government.

\* He is Professor of Department of Economics, Doshisha University and Professor Emeritus of Kyoto University. His research interests includes economic growth theory and macroeconomic dynamics. He graduated from Kwansei Gakuin University and received Ph.D. from Brown University. He was Professor of Institute of Economic Research, Kyoto University during 2009-2015.

#### Chair: Akihiko Yanase (Nagoya University)

He is Professor of Graduate School of Economics, Nagoya University. His research interests include international trade theory, economic dynamics, industrial organization, public economics, and environmental economics. He graduated from Keio University and received Ph.D. from Keio University.

# Hiroki Murakami\* (Chuo University)

# "Inflation-Deflation Expectations and Economic Stability in a Kaleckian System"

#### **Abstract**

In this paper, we analyze the impact of inflation-deflation expectations and the effect of the monetary authority's inflation-targeting policy in a Kaleckian system, on the basis of macrofoundation approaches. For this purpose, we build a dynamical system composed of four variables (the rate of utilization, the wage share, the nominal rate of interest and the expected rate of inflation) and examine the properties, especially stability, of this dynamical system. We then find that the existence of (adaptive) inflation-deflation expectations always destabilizes our Kaleckian system (irrespective of the revision speed of expectations) while that the monetary authority's intensive inflation-targeting policy can make the system stable but the effect of this policy depends heavily upon the public credibility of it. We also perform numerical simulations to check that our analysis is valid.

\* He is Associate Professor of Faculty of Economics, Chuo University. His research interests include macroeconomics and Keynesian economics. He graduated from University of Tokyo and received Ph.D. from University of Tokyo.

# Chair: Toichiro Asada (Chuo University)

He is Professor of Faculty of Economics, Chuo University. His research interests include Keynesian macroeconomics and macroeconomic dynamics. He graduated from Waseda University and received Ph.D. from Chuo University.

#### Arslan Razmi\* (UMass Amherst)

# "The Diverse Consequences of International Capital Flows: A Theoretical Exploration"

#### **Abstract**

Standard open economy macro models predict a contractionary effect of international capital inflows. Empirical evidence, on the other hand, often associates such inflows with short-term booms and policy makers frequently express concerns involving related Dutch disease issues.

Employing a portfolio balance framework, this paper distinguishes between international financial (i.e., bond) and "real" (i.e., equity) flows to explore the different consequences for capital accumulation that may follow. The presence of external economies of scale generates multiple equilibria, and different kinds of capital flows may push investment in one direction or the other.

\* He is Professor of Department of Economics of UMass Amherst. His research interests include open economy macroeconomics, international trade, development economics, political economy of growth and distribution, and history of economic thought. He graduated from University of Engineering and Technology Taxila and received Ph.D. from American University.

#### Chair: Shuhei Takahashi (Kyoto University)

He is Associate Professor of Institute of Economic Research, Kyoto University. His research interests include macroeconomics, computational economics, and Japanese economy. He graduated from Faculty of Integrated Human Studies, Kyoto University and received Ph.D. from Ohio State University.

# Makoto Nirei\* (University of Tokyo)

#### "Pareto Distribution of Income in Neoclassical Growth Models"

#### **Abstract**

We construct a neoclassical growth model with heterogeneous households that accounts for the Pareto distributions of income and wealth in the upper tail. In an otherwise standard Bewley model, we feature households' business productivity risks and borrowing constraints, which we find generate the Pareto distributions. Households with low productivity rely on wages and returns from safe assets, while high productivity households choose not to diversify their business risks. The model can quantitatively account for the observed income distribution in the U.S. under reasonable calibrations. Furthermore, we conduct several comparative statics to examine how changes in parameters affect the Pareto distributions. In particular, we find that the change in the top tax rates in the 1980s potentially accounts for much of the observed increase in top income dispersion in the last decades. Our analytical result provides a coherent interpretation for the numerical comparative statics.

\* He is Professor of Graduate School of Economics, University of Tokyo. His research interests include macroeconomics, business cycles, financial fluctuations, income inequality, innovation, and complex systems. He graduated from University of Tokyo and received Ph.D. from University of Chicago.

#### Chair: Yosuke Yasuda (Osaka University)

He is Associate Professor of Graduate School of Economics, Osaka University. His research interests include business economics and game theory with a primary interest in market design. He graduated from University of Tokyo and received Ph.D. from Princeton University.

# Hiroaki Sasaki\* (Kyoto University)

# "Growth and Distribution in a Dynasty-Overlapping Generations Economy"

#### **Abstract**

By building a growth model with two classes, workers and capitalists, this study investigates the existence and the stability of the long-run equilibrium along the lines of Pasinetti (1962) and Samuelson and Modigliani (1966). Unlike preceding studies in which the propensity to save of each class is exogenously given, this study assumes that workers solve a two-period overlapping generations model while capitalists solve an infinite-horizon dynamic optimization model. Depending on the combinations of both classes' time preference rate, the parameter of the production function, and the population growth rate, we obtain two kinds of long-run equilibria, the Pasinetti equilibrium and dual equilibrium a la Samuelson-Modigliani. We show that under realistic values of the parameters, the economy is likely to converge to the Pasinetti equilibrium.

\* He is Professor of Graduate School of Economics, Kyoto University. His research interests include macroeconomics and international economics, especially theoretical analysis on structural dynamics, economic growth, business cycle, economic development, and north-south trade. He graduated from Tohoku University and received Ph.D. from Tohoku University.

#### Chair: Munechika Katayama (Waseda University)

He is Associate Professor of Economics at Faculty of Political Science and Economics, Waseda University. His research interests include macroeconomics, monetary economics, applied econometrics, and the Japanese economy. He graduated from Keio University and received Ph.D. from University of California, San Diego. He was Assistant Professor of Graduate School of Economics Kyoto University during 2013-2017.

# Charles Yuji Horioka\* (Kobe University)

# "Do People Leave Bequests, and If So, Why and Does It Matter?"

#### **Abstract**

Intergenerational transfers (bequests, inter vivos transfers, and investment in the human capital of one's children) are an important source of the intergenerational persistence of wealth and income inequality. In this presentation, I will try to answer the following three questions:

- (1) Do people leave bequests and other intergenerational transfers? What is the quantitative importance of intergenerational transfers?
- (2) Why do people leave intergenerational transfers? For example, are intergenerational transfers motivated by intergenerational altruism toward one's children (the so-called altruism model)? Or are they motivated by a desire to induce one's children to provide care, attention, and financial support during old age (the so-called strategic bequest motive or exchanged model)? Or are they motivated by a desire to perpetuate the family line or the family business (the so-called dynasty model)?
- (3) Does it matter whether and why people leave intergenerational transfers? What are the policy implications? Research on intergenerational transfers has important implications for which theoretical model of household behavior applies in the real world and also for the intergenerational transmission of wealth disparities and for the effectiveness of fiscal policy and income redistribution programs for the elderly.
- \* He is Professor of Research Institute for Economics and Business Administration, Kobe University. His research interests include inequality, long-term care, households, families, saving, consumption, bequests, intergenerational transfers, parent-child relations, Japanese economy, and Asian economies. He graduated from Harvard University and received Ph.D. from Harvard University. He was Assistant Professor during 1983-1985 and Associate Professor during 1985-1987 of Faculty of Economics, Kyoto University.

#### Chair: Makoto Hasegawa (Kyoto University)

He is Associate Professor of Graduate School of Economics, Kyoto University. His primary field of research is public economics with an emphasis on taxation, particularly international taxation and corporate taxation. He graduated from Faculty of Economics, Kyoto University and received Ph.D. from University of Michigan.

# Peter Skott\* (UMass Amherst)

# "Aggregate Demand in the Long Run"

#### **Abstract**

Aggregate demand matters, both in the short and the long run. But the way it matters depends on the structural characteristics of the economy. A basic distinction must be made between dual and mature economies. Mature economies may suffer from a structural aggregate problem ('secular stagnation'): full-employment growth may be impossible in the absence of sustained fiscal stimulus. Dual economies with high levels of open or hidden unemployment, by contrast, may require public investment in key areas, including education and infrastructure, and there may be compositional problems of demand. But these economies do not face the same long-run structural aggregate demand problems as mature economies.

\* He is Professor of Department of Economics, UMass Amherst. His research interests include macroeconomics and income distribution based on post Keynesian economics. He graduated from University of Aarhus.

# Chair: Tosihiro Oka (Kyoto University)

He is Professor of Graduate School of Economics, Kyoto University. His research interests include environmental impact assessment, environmental policy, and economic theory. He graduated from Faculty of Economics, Kyoto University and received Ph.D. from Kyoto University.

# Naoki Yoshihara\* (UMass Amherst)

# "Technical Progress, Capital Accumulation, and Distribution"

#### **Abstract**

This paper studies the dynamic relations between technical change and equilibrium income distribution triggered by an innovation in capitalist economies characterised by a drive to accumulate. It examines the effect of technical progress on profitability in a dynamic general equilibrium framework. The main result shows that cost-reducing, capital-using and labour-saving technical change increases the equilibrium profit rate, but, counterintuitively, some forms of cost-reducing, capital-saving and labour-using technical change may lead to a decrease in profitability.

\* He is Professor of Department of Economics, UMass Amherst. His research interests include welfare economics, mathematical Marxian economics, theories of distributive justice, political competition, history of economic thoughts, and international trade theory. He graduated from Hokkaido University and received Ph.D. from Hitotsubashi University.

#### Chair: Masahiko Itaki (Ritsumeikan University)

He is Professor of Graduate School of International Relations, Ritsumeikan University. He has conducted a research on historical development of the world economy. He recently has a strong interest in the global financial crisis ignited by the subprime mortgage loan. He graduated from Faculty of Economics, Kyoto University and received Ph.D. from Kyoto University.

# Makoto Saito\* (Nagova University)

# Keynote Speech: "Wealth Inequality and Piketty's Progressive Wealth Taxation"

#### **Abstract**

Here, the rich are allowed access to risky, but high growth opportunities, but the poor are barred access to them for various reasons including fixed transaction costs and informational barriers. Then, the rich leverage their own wealth by borrowing from the poor in the form of safe financial instruments, and they enjoy even higher returns on their leveraged wealth. Without any policy intervention introduced, the wealth gap between the rich and the poor grows quickly, and the rich eventually dominate the entire wealth. This paper demonstrates that progressive wealth taxation, proposed by Piketty (2014), can prevent the rich from dominating the entire wealth even if its progressivity is fairly mild. Given these findings, the paper explores carefully and realistically how Piketty's wealth taxation is implemented in the real world.

\* He is Professor of Graduate School of Economics, Nagoya University. His research interests include macroeconomic theory and money/finance. He graduated from Faculty of Economics, Kyoto University and received Ph.D. from Massachusetts Institute of Technology. He was Associate Professor of Faculty of Economics, Kyoto University during 1995-1998.

#### Chair: Hiroaki Sasaki

# Giacomo Corneo\* (Free University of Berlin)

# "Lifetime Inequality and Lifetime Redistribution"

#### **Abstract**

We employ German social security records and a comprehensive microsimulation model to investigate intra-generational lifetime income inequality and redistribution at the level of birth-year cohorts, starting with those born in 1935. We detect a striking secular rise of lifetime income inequality, both pre-fisc and post-fisc. Over entire life cycles, the German tax-transfer system is found to be progressive and generating substantial effects on the disposable incomes of the two extreme deciles of the lifetime income distribution. The overall lifetime tax-transfer-system is close to linear. Governmental lifetime income redistribution mechanically reduces lifetime inequality by more than a fifth; redistribution displays an inverted-U shape over cohorts. Differential mortality increases lifetime income inequality by about 5 %. We develop a money-metric welfare measure that takes the value of greater longevity into account. We find that differential mortality increases lifetime welfare inequality by a substantially larger amount.

\* He is Professor of Department of Economics, of Free University of Berlin. He has published several works in the fields of public economics, labor economics, comparative economics, industrial organization, and growth theory. He graduated from Universitá Bocconi and received Ph.D. from EHESS, Paris.

#### Chair: Kazuhiro Kurose (Tohoku University)

He is Associate Professor of Tohoku University. His research interests include theories of growth and income distribution on the basis of the principle of effective demand, and policy implications. He is also interested in theories of equilibrium rate of profit and capital on the basis of multi-sectoral model. He graduated from Hokkaido University and received Ph.D. from Hokkaido University.

# Biung Ghi Ju\* (Seoul National University)

# "Inequality of Opportunity in Educational Achievement: A Cross-Country Comparison using TIMSS and PISA"

#### Abstract

We investigate inequality of opportunity for educational achievement using international comparative studies of student achievement, TIMSS (Trends in International Mathematics and Science Study) and PISA (Programs for International Students Assessment). Students are divided into different groups depending on their socio-economic backgrounds. Opportunity inequality exists, when the distribution of educational achievements (test scores) in one group stochastically dominates the distribution in the other group. We analyze existence of opportunity inequalities in countries reported in TIMSS and PISA. Using two opportunity inequality indices, we provide a cross-country comparison of opportunity inequalities. In order to assess socio-economic background, we aggregate parents' education levels and other surveyed factors relevant to parental support and other available resources for education into a socio-economic background index, SEBI, which allows us to partition the population in each country into three groups based on an internationally comparable standard. Other socioeconomic background indices based on parental education or type of parental occupation, widely used in the literature, are not fully comparable across countries. Our results report that countries with low levels of opportunity inequality are Hong Kong, Canada, and Finland and that countries with high levels of opportunity inequality are England, New Zealand, Australia, and USA. We compare the trend of opportunity inequality across countries over the last two decades; some countries have experienced increasing opportunity inequalities while the other countries have experienced either decreasing or steady trend.

\* He is Professor in the Department of Economics at Seoul National University and the director of the Center for Distributive Justice. His research and teaching interests are in distributive justice, income distribution and inequality, social choice and voting, and fair allocation theory. He graduated from Seoul National University and received Ph.D. from University of Rochester.

#### Chair: Kazuhito Ogawa (Kansai University)

He is Professor of Faculty of Sociology, Kansai University. His research interests include experimental economics, behavioral economics, agent-based approach, and game theory. He graduated from Faculty of Economics, Kyoto University and received Ph.D. from Kyoto University.

# Shinichi Nishiyama\* (Kyoto University)

# "Fertility, Education, and Economic Growth"

#### **Abstract**

This paper extends a standard heterogeneous-agent overlapping-generations model by incorporating fertility and education decisions, similar to the ones in de la Croix and Doepke (AER, 2003), of altruistic households. Households in the present paper are heterogeneous with respect to their human capital (labor productivity) and assets (wealth), and they choose their consumption, number of children, education spending (for their children), and bequests to maximize their lifetime utility. Calibrating the model to the U.S. economy, the paper first analyzes the effects of human capital and wealth inequalities on economic growth. The paper next analyzes the effects of various tax and transfer policies on income and wealth inequalities, economic growth, and social welfare. Preliminary findings from the model include: the mean preserving spread of initial human capital would reduce, but only modestly, the growth rate per household in the medium run; child subsidies would increase inequalities and decrease total output per household.

\* He is Professor of Graduate School of Economics, Kyoto University. His research topics include the effects of tax, social security, public pension systems on individual households and macro economy; intergenerational transfers and education investment within a family line based on altruistic and/or risk-sharing motives. He graduated from Keio University and received Ph.D. from University of Pennsylvania.

#### Chair: Takayuki Tsuruga (Osaka University)

He is Professor of Institute of Social and Economic Research, Osaka University. His areas of specialization are monetary economics, macroeconomics, and applied time series econometrics. He graduated from Waseda University and received Ph.D. from Ohio State University. He was Associate Professor of Graduate School of Economics, Kyoto University during April 2010 and March 2016 and during April 2017 and September 2017.

# Koichi Futagami\* (Osaka University)

# "Aging, Retirement, and Skill Acquisition in a Growth Model"

#### Abstract

We construct an overlapping generations model of semi-endogenous growth in which individuals faces a probability of death and their retirement age is determined endogenously or exogenously. Individuals determine whether they receive education or not. If she or he does not receive education, she or he becomes an unskilled worker. If an individual receives an education, she or he can become a skilled worker and can earn higher wages; however, she or he must spend some period in school and give up wages for unskilled workers. We explore how population aging affects individuals' decisions on skill acquisition and output level.

\* He is Professor of Graduate School of Economics, Osaka University. His main research filed is macroeconomics and economic growth theory. He is especially interested in the relationship between human capital accumulation and economic growth and the relationship between industrial policies and economic growth. He graduated from Faculty of Science, Kyoto University and received Ph.D. from Osaka University.

#### Chair: Ken Tabata (Kwansei Gakuin University)

He is Professor of School of Economics, Kwansei Gakuin University. His research interests include economic growth theory and public economics. He graduated from Yokohama National University and received Ph.D. from Osaka University.