



Global COE Hi-Stat Newsletter

No. 4 (July 2010)

Contents

Report on the <i>Journal of Economic Dynamics and Control</i> Conference on Frontiers in Structural Macroeconomic Modeling	Toshiaki Watanabe...1
Report on the Global COE International Seminar on Public Economics	Motohiro Sato...3
Love Affairs with Chinese and Japanese Numbers	Harry Wu...5
Discussion Papers	...10
Seminars and Conferences	...11
Awards	...14
Ph.D. Conferments	...14

Report on the *Journal of Economic Dynamics and Control* Conference on Frontiers in Structural Macroeconomic Modeling: Thirty Years after “Macroeconomics and Reality” and Five Years after “Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy”

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On January 23 and 24, 2010, the Statistical Theory Group of Hitotsubashi University's Global COE Program “Research Unit for Statistical and Empirical Analysis in Social Sciences” (G-COE Hi-Stat), jointly with the Institute for Monetary and Economic Studies of the Bank of Japan, held an international conference on macroeconomic and macroeconometric modeling at Hitotsubashi University's Mercury Tower. Three keynote speeches, two lectures by invitation, and ten papers were presented and the conference attracted 94 participants. The lectures and papers were so excellent that it was difficult to confine the ensuing discussions to the time frame they were allotted.



Professor Sims delivering his keynote speech

Models used for macroeconomic analysis can principally be divided into two types: vector autoregressive (VAR) models and dynamic stochastic general equilibrium (DSGE) models. This year, 2010, is thirty years since Christopher Sims (Princeton University) published "Macroeconomics and Reality," an important paper on VAR models, in *Econometrica*, and five years since Laurence Christiano, Martin Eichenbaum (both from Northwestern University), and Charles Evans (President of the Federal Reserve Bank of Chicago) published "Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy," an important paper in the field of DSGE models, in the *Journal of Political Economy*. Commemorating these publications, Prof. Sims, Prof. Christiano, and Prof. Eichenbaum were invited to the conference as keynote speakers.



Professor Christiano delivering his keynote speech

Siddhartha Chib (Washington University) and Frank Smets (European Central Bank) were also invited as speakers. A main feature of macroeconomic analysis in recent years has been the use of Markov Chain Monte Carlo (MCMC) methods for estimation. Prof. Chib is an internationally respected authority on MCMC methods, while Prof. Smets together with Prof. Raf Wouters (National Bank of Belgium) estimated the DSGE model developed by Christiano, Eichenbaum

and Evans (referred to as the "CEE model" below) using MCMC methods. Because DSGE models are firmly based in theory, incorporating, for example, dynamic maximization of expected utility by consumers and maximization of expected profits by firms, they have the advantage that it is easy to identify shocks and, moreover, that it is possible to estimate the structural parameters that will not be affected by policy changes. However, the data fit of DSGE models has been found to be not as good as that of VAR models, which are not constrained by macroeconomic theory. Against this backdrop, Smets and Wouters showed that the data fit of the CEE model, which adds various frictions such as price and wage rigidities, habit formation in consumption, and adjustment costs in investment, is almost identical to that of the VAR model. Sparked by this finding, DSGE models have been widely used since then, particularly by central banks. Another reason for the rapid spread is the development of Dynare, a free software that makes the MCMC estimation of DSGE models easy and was developed by Michel Juillard (Bank of France, CEPREMAP), an organizer of this conference.

To digress briefly, it was from Prof. Sims, who was my supervisor at Yale University, that I learned the use of MCMC methods, while Prof. Smets was a classmate of mine at Yale.

The other papers were chosen on the basis of a call for papers in the *Journal of Economic Dynamics and Control*, an international academic journal. We received 109 applications, from which four of the organizers, namely Michel Juillard, Ipppei Fujiwara (Bank of Japan), Shigenori Shiratsuka (Bank of Japan), and Toshiaki Watanabe selected ten papers after careful consideration. The selected authors include leading researchers in the field of macroeconomic and macroeconomic modeling such as Marco Del Negro (Federal Reserve Bank of New York), Jinill Kim (Federal Reserve Board) and Gianni Amisano (European Central Bank).

The papers can be broadly divided into two groups. The first group consists of model refinements. In

particular, a number of papers, reflecting the financial crisis and subsequent deterioration in employment conditions in recent years, attempted to model financial and credit markets as well as the labor market in greater detail. The second group of papers is concerned with the refinement of econometric methods. More specifically, papers considered efficient MCMC algorithms for the estimation of DSGE models, methods of estimating nonlinear DSGE models, and analytical methods incorporating a zero lower bound on nominal interest rates or Markov Switching into DSGE models. The content of these papers is valuable not only for macroeconomists, but also for econometricians. Details can be found in the papers and presentation slides, which can be downloaded from

<http://gcoe.ier.hit-u.ac.jp/JEDC2010/program.html>.

The papers presented at the conference are currently being more carefully reviewed, and a selection of them will be published in a special issue of the *Journal of Economic Dynamics and Control*.

This kind of macroeconomic and macroeconometric analysis is an important field not only from an academic standpoint but also for policymakers in considering macroeconomic policy such as monetary and fiscal policies. Therefore, the Statistical Theory Group of the G-COE Hi-Stat program and the Ministry of Education, Culture, Sports, Science and Technology-funded Grant-in-Aid for Scientific

Research (A) project on the “Econometric Analysis of Macroeconomic Policies under the Financial Crisis,” which I lead, will continue to work together with researchers in macroeconomics and finance in the other groups of the G-COE Hi-Stat program in order to continue pushing ahead with research in this field. We plan to hold a similar conference in 2012, the final year of the G-COE Hi-Stat program and the Grant-in-Aid for Scientific Research. Since there were a large number of applications for this conference, I did not present a paper myself and only served as chair and discussant, but at the next conference, I would like to give a paper and present the results of my own work. Also, to foster greater understanding of this field in Japan, I explained it at tutorial sessions of the 2009 Japanese Joint Statistical Meeting at Doshisha University and the 2010 Japanese Economic Association Spring Meeting at Chiba University. (For more details, please refer to the presentation materials in Japanese on the following website:

<http://gcoe.ier.hit-u.ac.jp/information/schedule/schedulelog/index.html>) Although there were only two Japanese speakers at the conference this time, I hope that research in this area will advance in Japan so that we will see more Japanese speakers at the next conference.



Report on the Global COE International Seminar on Public Economics

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The global economy, including Japan, has reached a threshold. The development of a global economy in which people, goods, and capital move freely across borders is presenting new challenges to the ability of governments to impose and collect taxes. A higher (effective) corporate tax rate than in other countries may lead to an outflow of companies (capital) and the transfer of corporate earnings. We have seen the emergence of international competition in taxation (i.e., a race to reduce corporate tax rates) in a bid to avoid such outcomes and instead attract foreign companies and investment. At the same time, many countries need to respond to declining fertility rates and have done so by expanding child support by granting cash or in-kind benefits. The child allowance in Japan (of 13,000 yen a month) is one example. In addition, global environmental problems are becoming increasingly serious. This has given rise to the need for a "strategic government response" by countries around the world as well as intergovernmental cooperation on environmental policies as an "international public good."

At the same time, there have been a number of new theoretical developments in the field of public economics. The analytical framework of non-cooperative games is, for example, widely applied to models of tax competition. This framework is applied not only to simple Nash games but also to strategic policy decisions among governments in subgame perfect equilibrium models in which the decision-making (moves) of players extends over multiple stages. Another development is optimal tax theory as second best in the context of asymmetric information problems. Beginning with the nonlinear optimal income tax of Mirrlees (1971) and going through Stiglitz (1982), optimal tax theory has been

extended to policies other than taxation, such as public goods and benefits in kind.

New policy challenges can be addressed using these new analytical methods or theories. In the Global COE International Seminar on Public Economics held on March 8, 2010, young researchers in public economics from Canada, Germany, and France were invited to present the latest results of their work on the themes above and exchange opinions. In addition to the five foreign researchers, one COE Young Researcher also presented a paper. Summaries of their papers are as follows:

Jean-François Tremblay discussed an international non-cooperative game of emission-reduction efforts and showed that if each country were to commit to a scheme that provides a certain link between emission reductions of other countries and its own efforts, the subgame perfect equilibrium would achieve Pareto optimality. Marie-Laure Breuillé, in a two-tier jurisdictional setting (national – regional – local), examined the effects of a reorganization (merger and widening) of regional jurisdictions when taxation at each level of government (taxation on capital that is mobile between jurisdictions) gives rise to horizontal and vertical tax externalities. Focusing on tax competition, Emmanuelle Taugourdeau showed that in the presence of strategic complementarity in regions' choice of tax rate, all regions would be better off than in a Nash equilibrium (when all move at the same time) if some behaved as leaders (first movers) in the game. Next, Thomas Lange demonstrated that when two countries (universities) compete for foreign students and one chooses to offer high quality education for high tuition fees, while the other chooses low quality education and low tuition fees, the result is an asymmetric equilibrium that avoids direct

competition (segmented competition). Junichiro Takahata (Hitotsubashi University) considered how optimal taxation (subsidies for and taxation of childcare services) should be designed in the presence of household production of child care. Finally, Günther König analyzed the role of structural funds (for providing support for infrastructure construction in low-income countries) in regionally integrated economies in disciplining (partially self-serving) governments.

Some of these papers are available for download as part of the CCES Discussion Paper Series of the Center for Research on Contemporary Economic

Systems (<http://www.econ.hit-u.ac.jp/~cces/dp.html>). In addition, the visit of these overseas scholars provided an excellent opportunity to strengthen our international research links and collaborate with these scholars in the future.

The program of this conference is available on the following website [PDF: 29KB]:

http://www.econ.hit-u.ac.jp/~cces/international_seminar_on_public_economics_program.pdf

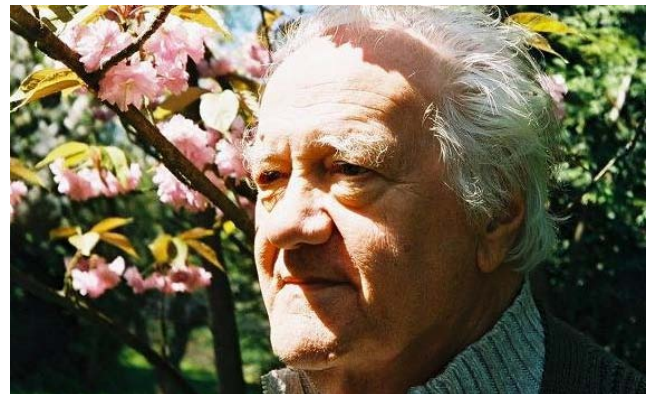
Love Affairs with Chinese and Japanese Numbers

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On 24 April 2010, the economics profession lost one of the world's most gifted scholars ever to quantitatively document economic performance over a very long period of time and across major countries in every continent of the world. Professor Angus Maddison died from complications arising from leukemia at the American Hospital in Paris. He was buried in the church graveyard in Chevincourt, a village near Compiègne where he had lived with wife Penny for the latter part of his life. He is also survived by his two sons, George and Charles, his daughter Lizzy, and five grandchildren.

Much has been written about Angus Maddison's life and work, which were devoted to the understanding and interpretation of the dynamics and sources of growth and development in human history, including a recent article by Derek Blades, Bart van Ark and myself.¹ Here, I would like to refresh some of our



memories about Angus Maddison's research activities on quantifying Chinese and Japanese economic performance in the long run as well as his contacts with Chinese and Japanese scholars, a topic that I immediately felt to be very appropriate when I was asked to write a memorial piece for the *Newsletter* of Hitotsubashi University's Global COE Program, even though it is difficult to do it justice in a short article.

Angus's passion for Japan and China was no accident. It was aroused by his interest in the role of

¹ The article will be published in *The Review of Income and Wealth* in September, 2010. Some of its contents are used

in the present paper without specifying the source.

institutions in the economic development of the two Asian giants. During the first half of his time in Groningen (from 1978 to the late 1980s), Angus continued his broadly-based research on growth and development. Following several earlier books he had written on this topic, he published two major monographs in 1982 and 1991 and a seminal article on growth accounting in 1987 in the *Journal of Economic Literature*. These writings explained his understanding of the dynamics and sources of growth and development. His characterization of development in terms of secular phases rather than the Kondratieff notion of long waves led to a more gradualist interpretation of the diffusion of technology and innovation, and a greater emphasis on "system shocks." These shocks were in part historical accidents, but their impact was reinforced by changes in expectations, and fashions in economic policy. These views, based on strong quantitative support, challenged scholars who had advanced the notion of a more abrupt "industrial revolution" in the late 18th century, or traditional development economists who supported the Rostovian view of the need for an economic "take-off" to generate growth. Angus was also an early advocate of the need to take economic institutions much more seriously by developing a model that distinguished between proximate sources of growth (directly measurable economic inputs, such as labour, physical and human capital and land) and ultimate sources (institutional, political, social and cultural). He believed that the complex interaction of these proximate and ultimate sources allowed a multipolar development in Europe in the Middle Ages.

I remember his last trip to China to celebrate the publication in Chinese of *The World Economy: A Millennial Perspective*. He was accompanied by me to visit Hangzhou, the capital of China's Southern Song (1127–1279), then the richest country in the world according to his estimates. He was warned about the potential danger of the highway drive and that it would be a tiring day trip but he was still keen to go. Filled with excitement at stepping on the land of Hangzhou,

he then realized that it was hard to find any trace of its past prosperity. He remarked that wrong policies or mistakes by the ruling elite could easily wipe out a country's accumulated wealth for centuries – a big question hanging there that had motivated his long pursuit for the underlying explanations of economic growth.

Maddison also returned to the topic of measuring economic performance beyond the Western world, but began to place it more strongly in an international comparative perspective. In the early 1980s he criticized Paul Bairoch's view that the industrialization of the Western European countries took place at an average standard of living below that of contemporary less developed countries, which was very different from the conjectures by David Landes and Simon Kuznets who believed that by that time Western Europe was already much richer than the rest of the world. To Angus Maddison these remarkably different quantitative conclusions had very important analytical implications: "If Bairoch is right, then much of the backwardness of the third world presumably has to be explained by colonial exploitation, and much less of Europe's advantage can be due to scientific precocity, centuries of slow accumulation, and organizational and financial prosperity" (Maddison, 1983). Although he used the existing evidence at the time to show that Bairoch and his epigoni probably overstated the contemporary income gap and understated per capita income growth in the developing world, it motivated him to pursue the topic of international comparisons more intensively. Following his later work on China (see below), he returned to the topic of comparative performance between East and West at the time of the industrial revolution, when other scholars, notably Kenneth Pomeranz, argued that China stayed at a much higher level of development until the end of the 18th century than Europe – a viewpoint which Maddison strongly criticized on the basis of his reconstruction of China's macroeconomic accounts back to the year 960.

From the early 1960s to the early 1970s, he worked

mainly on problems of economic development at the OECD Development Centre and as an economic advisor for the Twentieth Century Fund and the Harvard Advisory Service. The major aim of his work in this field was to understand why the rest of the world is much poorer than Western countries and to distinguish different types of non-Western experience. He realized that “differences in the level of development in the non-Western countries are very wide and there is great heterogeneity in their institutional heritage.” In interpreting the reasons for “backwardness,” he began to explore the role of colonialism, indigenous social forces, institutions, property rights, religion, and ideology by studying in depth some major country cases. Japan as the first of the seven such countries of “the third world” entered his research agenda. Although China was the last case of his series of country studies and his work on China was published almost thirty years later (1998) than his work on Japan (1969), it had since never been out of the focus of his research life. To Angus, a comparison between post-Meiji Restoration Japan’s positive response to and quick catch-up with the West and China’s catastrophic experience during the same period was a good example for understanding the role of institutions and government policy in economic development.

Angus made his first trip to Japan in 1961 when he met Kazushi Ohkawa and several other scholars at the Institute of Economic Research (IER) of Hitotsubashi University. This was the time when Ohkawa was starting to publish 13 volumes on Japanese quantitative economic history. Throughout the rest of his life, Angus maintained a very high view of the quantitative research under the leadership of Ohkawa and the research environment at the IER. During that trip, Angus was also impressed by what he observed in Japanese society. Later, recounting his experience of his 1965 trip to Japan, he wrote: “I was struck by the strong discipline and an organization that operated like clockwork...[and] when I visited the Sony radio factory, I found the foremen had PhDs and

all the operatives had high school education” (Maddison, 1994).

Angus’s contacts with a later generation of scholars at the IER began in the late 1980s when he was offered a visiting scholarship by the Japan Society for the Promotion of Science in 1989 and was hosted by Konosuke Odaka and Osamu Saito. As recalled by Odaka, Angus, from his first impression, was very much like Ohkawa in that he was very enthusiastic about any topic related to economic development and economic history, and could be easily engaged in an interesting and seemingly never-ending discussion. During his stay at the IER (about six weeks), Angus spent most of his time reading almost everything available in western languages on Japanese economic history as well as talking to the people at the IER, including young researchers. Angus Maddison paid another major visit to the IER in 1998 during the IER’s first COE program on Asian Historical Statistics under the leadership of Odaka. During his stay, he engaged Saito in some intensive discussions on Japanese economic history and especially demographic history, which apparently benefited his research on Japan’s development as part of his then new book, *The World Economy: A Millennial Perspective*, published in 2001.

Angus Maddison also paid other short visits, during which he gave seminars, acted as an evaluator of the IER’s first COE program, and promoted exchanges of young researchers between the IER and the Groningen Growth and Development Center (GGDC). In fact, it was he who introduced me to Odaka, which began my engagement with the IER. Angus’s last visit to Japan in September-October 2007 – perhaps his very last trip to Asia – was to attend an international symposium at the IER and, more importantly, to receive an honorary doctorate from Hitotsubashi University for his great contributions to scholarship and the economics profession.

The debate with Bairoch and his followers points to the importance of quantitative assessment of China’s long-run economic performance. This is important not

only for China but also for positioning other economies in the world. In fact, in the debate, he compared Japan's Tokugawa period with China rather than with Western Europe as other studies did. While like many researchers he attempted to explain the divergences between countries, Angus paid more attention, and devoted a great deal of effort, to the understanding of important convergences in the past, in most of which China served as an important reference, such as Europe's rise from its nadir to overtake China, the Japanese catch-up with China in Tokugawa times, and the post-war resurgence of Asia, especially China, India, and the so-called tigers which have narrowed their degree of backwardness substantially with the advanced countries.

Angus's early work on China relied mainly on quantitative research by Dwight Perkins (1975), Ta-chung Liu and Kung-chia Yeh (1965), and studies commissioned by the U.S. Congress Joint Economic Committee (1978), some of which appeared in his discussion of the debate between Bairoch and Landes-Kuznets. After the debate, perhaps since the early 1990s, he substantially extended his investigation of Chinese economic history, exploring the literature on quantitative assessments of China. New research by himself and in collaboration with others eventually led to his book, *Chinese Economic Performance in the Long Run* (1998). This was also a period in which he began to work and discuss with Chinese economists. I may be the only one who had since spent a great deal of time working with him on the reconstruction of China's national accounts, on the development of an alternative industrial output index for China, and on the Chinese translation of his three books, including a revised and updated version of his China book in 2007.

Angus immediately contacted me when my article on the estimation of China's GDP in the central planning period appeared in *The Review of Income and Wealth* in 1993. We then started to communicate through fax on how to understand the problems in China's official statistics due to both methodological

and institutional deficiencies, and how to obtain better estimates for China's real GDP. Our discussion deepened after we first met at an economics conference held at the University of New England, Australia, in 1995, possibly arranged by Prasada Rao. The idea began to emerge that it might be possible to use the physical output of major commodities to bypass the price distortions in the central planning period – a problem that I did not tackle in my 1993 paper. In early 1996, I spent a couple of months working with him on reconstructing China's industrial GDP, first at his home in Chevincourt and then at the GGDC. He discussed everything with me in detail, from the selection of commodities to benchmark problems and the weighting and aggregating procedures at various levels. For each round of the estimates, he always checked the results carefully and discussed them with me almost commodity by commodity and industry by industry. My preliminary empirical results lent strong support to his hypothesis that the official industrial statistics exaggerated the growth rate, while underestimating the level, of national output. The revisions and updates that followed have repeatedly confirmed these findings.

Meanwhile, Angus also conducted major data work on China in three areas, namely, the reconstruction of China's agricultural output accounts for 1975, 1987 and 1994 using output quantities, the estimation of China's agricultural production PPP using the US as the benchmark for 1987, and the reconstruction of the output of China's "non-material" services. Thus, together with my results on manufacturing, mining and utilities, he eventually obtained a new set of sector-level GDP estimates for China. Needless to say, these efforts provided a consistent quantitative basis for his China book, *Chinese Economic Performance in the Long Run* (1998), the last but most comprehensive country case study in his life.

After conducting such serious work on China's economic history, he wrote: "My judgment on the contours and chronology of dynastic China's development (i.e. the rise in per capita income in the

Sung and its stagnation from the fourteenth to the mid nineteenth century) is not unlike that of Mark Elvin, R. M. Hartwell, Eric Jones and Justin Lin. However, they do not attempt macro-quantification, and their qualitative judgment probably implies a bigger leap in the Sung than I find. Some of them suggest that Sung China was trembling on the verge of an industrial revolution, which seems exaggerated. Some tend to overstate the degree of stagnation and the decline in 'creativity' from 1300 to 1850. In this period, China managed (with some interruptions) to sustain per capita income levels, whilst increasing its population more than fourfold (compared with less than threefold in Europe). 'Extensive' growth on this scale is not the same as stagnation."²

Angus's passion for China continued till the very late period of his life. He completely revised his China book in 2007 when his health was already beginning to decline. In fact, after his China book was published in 1998, he continued working with me on at least three major revisions of my industrial index and discussing data issues for updating his estimates of the performance of other sectors. He maintained a good friendship with several Chinese scholars, including Angang Hu, Bozhong Li, Justin Lin, Debin Ma, Xin Meng and Xiaolu Wang. At different stages of his research on China he also engaged in extensive discussions with Chinese economists such as Ruoen Ren, Xianchun Xu and Ximing Yue on the problems of measuring price change, service output and employment in China.

Just this February, only two months before he passed away, we still discussed intensively over the telephone whether a new approach I proposed should be used to reexamine China's post-reform growth performance and compare the results with those based on the old approach adopted in our earlier joint work (Maddison and Wu, 2008). In March, I sent him the comparison via email and at the same time asked

him about his estimates of hours worked in one of his early articles published in 1954. But unfortunately he was too weak to continue our discussion or answer my questions.

Angus was my mentor who played a very important role in my scholarly pursuits. He was also a colleague and friend, all at the same time. I remember the great moments with him at his home with his family in France, at conferences, or wherever else in the world we would meet. Angus was exceptionally gifted in combining work and pleasure in a very natural way. Angus Maddison will be missed. But his legacy will stay, and many will continue the work in his spirit.

Selected References

Maddison, Angus (1983), "A Comparison of Levels of GDP Per Capita in Developed and Developing Countries 1700-1980", *Journal of Economic History*, Vol. 41, No. 1, March, pp. 27-41.

Maddison, Angus (1987), "Growth and Slowdown in Advanced Capitalist Economies: Techniques of Quantitative Assessment", *Journal of Economic Literature*, Vol. XXV, June, pp. 649-698.

Maddison, Angus (1994), "Confessions of a Chiffrephile", *Banca Nazionale del Lavoro Quarterly Review*, No. 189, June, pp. 123-165 (also available on his website maintained by the Groningen Growth and Development Center).

Maddison, Angus (1998), *Chinese Economic Performance in the Long Run*, OECD, Paris; an electronic version is available online at: www.ggdc.net/Maddison.

Maddison, Angus and Harry X. Wu (2008), "Measuring China's Economic Performance", *World Economics*, Vol. 9, No. 2, pp. 13-44.

² Angus Maddison, "Research Objectives and Results, 1952-2002," available on his website maintained by the Groningen Growth and Development Center.

Global COE Hi-Stat Discussion Papers (March 2010—June 2010)

- No. 118 (March 2010) Masayoshi Hayashi and Yohei Kobayashi, "The Effects of Central Grants on Decentralized Social Programs: Post-2005 School Expense Assistance in Japan."
- No. 119 (March 2010) Ryo Kambayashi, "Dismissal Regulation in Japan."
- No. 120 (March 2010) Ryo Kambayashi, "Several Aspects on Non-regular Employees in Recent Japan" (in Japanese).
- No. 121 (March 2010) Sonku Kim, Inkwon Lee, Keunkwan Ryu, and Sang-Seung Yi, "Econometric Damage Estimation from the Bid Rigging in the Korean Military Oil Procurement Auctions during 1998-2000" (in Japanese).
- No. 122 (March 2010) Hideaki Sakawa and Masato Ubukata, "The Reform of the Tokyo Stock Exchange and Transparency" (in Japanese).
- No. 123 (March 2010) Koji Miyawaki, Yasuhiro Omori, and Akira Hibiki, "Panel Data Analysis of Japanese Residential Water Demand Using a Discrete/Continuous Choice Approach."
- No. 124 (March 2010) Jouchi Nakajima and Yasuhiro Omori, "Stochastic Volatility Model with Leverage and Asymmetrically Heavy-tailed Error Using GH Skew Student's t-distribution."
- No. 125 (March 2010) Takashi Kurosaki, "Long-term Agricultural Growth in India, Pakistan, and Bangladesh" (in Japanese).
- No. 126 (March 2010) Jun Nakabayashi, "Small Business Set-asides in Procurement Auctions: An Empirical Analysis."
- No. 127 (March 2010) Donatella Gatti, Ryo Kambayashi, and Sébastien Lechevalier, "Wage and Productivity Differentials in Japan: The Role of Labor Market Mechanisms."
- No. 128 (March 2010) Taiji Furusawa and Hideo Konishi, "Contributing or Free-Riding? Voluntary Participation in a Public Good Economy."
- No. 129 (March 2010) Michiru Sakane, "News-Driven International Business Cycles: Effects of the US News Shock on the Canadian Economy."
- No. 130 (March 2010) Zhao Chen, Ming Lu, and Guanghua Wan, "Inter-Industry Wage Differentials: An Increasingly Important Contributor to Urban China Income Inequality."
- No. 131 (March 2010) Shiqing Jiang, Ming Lu, and Hiroshi Sato, "Identity, Inequality, and Happiness: Evidence from Urban China."
- No. 132 (March 2010) Judith K. Hellerstein, Melissa McInerney, and David Neumark, "Neighbors and Co-Workers: The Importance of Residential Labor Market Networks."
- No. 133 (March 2010) Paul Sharp, Holger Strulik, and Jacob Weisdorf, "The Determinants of Subsistence Income in a Malthusian World."
- No. 134 (March 2010) Somsupa Nopprach, "Comparative Advantage in the Asian Automotive Industry."
- No. 135 (April 2010) Keiya Eto, "An Examination of the Statistical Data Sources of the Philippines: Notes on Estimating the Historical GDP of the Primary Industry (2)" (in Japanese).
- No. 136 (April 2010) Jota Ishikawa, Hodaka Morita, and Hiroshi Mukunoki, "FDI in Post-Production Services and Product Market Competition."
- No. 137 (May 2010) Koichi Tadenuma, "Partnership-Enhancement and Stability in Matching Problems."
- No. 138 (May 2010) Jean-Pascal Bassino, Kyoji Fukao, Ralph Paprzycki, Tokihiko Settsu, and Tangjun Yuan, "Regional Inequality and Industrial Structures in Pre-War Japan: An Analysis Based on New Prefectural GDP Estimates."
- No. 139 (May 2010) Maki Michinaka and Takahiro Ito, "Multidimensional Poverty Rankings based on the Pareto Principle: A Practical Extension."
- No. 140 (June 2010) Susumu Imai, Hajime Katayama, and Kala Krishna, "A Quantile-based Test of

Protection for Sale Model.”

No. 141 (June 2010) Jota Ishikawa and Toshihiro Okubo, “Environmental Standards under International Oligopoly.”

No. 142 (June 2010) Larry D. Qiu and Wen Zhou, “Trade, Capital Redistribution and Firm Structure.”

No. 143 (June 2010) Osamu Saito and Tokihiko Settsu, “Unveiling Historical Occupational Structures and its Implications for Sectoral Labour Productivity Analysis in Japan's Economic Growth.”

No. 144 (June 2010) Eiji Kurozumi and Purevdorj

Tuvaandorj, “Model Selection Criteria in Multivariate Models with Multiple Structural Changes.”

No. 145 (June 2010) Eiji Ogawa, “Regional Monetary Coordination in Asia after the Global Financial Crisis: Comparison in Regional Monetary Stability between ASEAN+3 and ASEAN+3+3.”

Global COE Hi-Stat Discussion Paper Series

<http://gcoe.ier.hit-u.ac.jp/english/research/discussion/index.html>

Seminars and Conferences (February 2010—June 2010)

105th (February 5, 2010)

Seminar for Young Researchers

co-organized with the Workshop on Law and Economics

Yasuhiro Arai (Hitotsubashi University), “Civil and Criminal Punishments for Copyright Infringement”

106th (February 5, 2010)

Global COE Lecture

co-organized with the Workshop on Economic Theory

Yossi Spiegel (Tel-Aviv University; CEPR; ZEW)

“Partial Cross Ownership and Tacit Collusion under Cost Asymmetries”

107th (February 8, 2010)

Global COE Lecture

Yossi Spiegel (Tel-Aviv University; CEPR; ZEW),

“Licensing of Intermediate Technologies”

108th (February 8, 2010)

Seminar for Young Researchers

co-organized with the Workshop on Law and Economics

Tsuchihashi Toshihiro (Hitotsubashi University), “Sequential Auctions with Different Ending Rules”

109th (February 18, 2010)

8th Global COE Research Workshop

Tokihiko Settsu (Hitotsubashi University), “Estimates of Prefectural Populations in Modern Japan: 1898-1920” (in Japanese)

110th (February 20, 2010)

Global COE Hi-Stat Workshop on Industrial Organization and Competition Policy

Sang-Seung Yi (Seoul National University), Noriaki Matsushima (Osaka University), and Jun Nakabayashi (University of Tsukuba)

111th (February 23, 2010)

Workshop on International Trade and FDI

co-organized with the Center for Research on Contemporary Economic Systems

Chia-Hui Lu (City University of Hong Kong), “The Organization of Production and Trade”

112th (February 23, 2010)

Lecture organized by the Global COE Hi-Stat

program and the Center for Research on Contemporary Economic Systems

Menahem E. Yaari (The Hebrew University of Jerusalem), “Correlation and Cooperation”

113th (February 24, 2010)

2nd General Meeting of the Global COE Hi-Stat Program

114th (February 27-28, 2010)

2nd Winter Institute of Macroeconomics

- organized by Shin-ichi Fukuda (University of Tokyo), Koichi Futagami (Osaka University), Akihisa Shibata (Kyoto University), Etsuro Shioji (Hitotsubashi University), and Makoto Saito (Hitotsubashi University)
- 115th (March 4, 2010)
CEI Workshop on Governance, Institutions, and Performance
Pramuan Bunkanwanicha (ESCP Europe), Joseph Fan (Chinese University of Hong Kong), Vikas Mehrotra (University of Alberta), Iftekhar Hasan (Rensselaer Polytechnic Institute), and Kasper Nielsen (Chinese University of Hong Kong)
- 116th (March 8, 2010)
Public Economics Seminar for Young Researchers
Jean-François (Tremblay University of Ottawa), Marie-Laure Breuillé (INRA), Emmanuelle Taugourdeau (ENS Cachan), Thomas Lange (University of Konstanz), Junichiro Takahata (Hitotsubashi University), and Günther König (Johannes-Gutenberg Universität Mainz)
- 117th (March 14-15, 2010)
Japan Society for the Promotion of Science (JSPS) Invitational Training Program for Advanced Japanese Research Institutes, Workshop on “Law and Economics of Markets”
co-organized with the Center for Intergenerational Studies and the Egusa Foundation
Andrew Daughety (Vanderbilt University), Koichi Hamada (Yale University), Hideshi Itoh (Hitotsubashi University), Jennifer Reinganum (Vanderbilt University), and Michael Riordan (Columbia University)
- 118th (March 16, 2010)
Workshop on International Trade and FDI
co-organized with the Center for Research on Contemporary Economic Systems
Yoichi Sugita (Columbia University), “Matching, Quality, and Comparative Advantage: A Unified Theory of Heterogeneous Firm Trade”
- 119th (March 8, 9, and 16, 2010)
Law and Economics Group Lectures
- co-organized with the Center for Intergenerational Studies and the Egusa Foundation
Jennifer Reinganum (Vanderbilt University), “Settlement Bargaining”
Andrew Daughety (Vanderbilt University), “Product Quality and Imperfect Competition”
Michael Riordan (Columbia University), “Abuse of Dominant Power”
- 120th (March 27, 2010)
“Construction of Longitudinal Networks with Middle Eastern Countries”
co-organized with the Ministry of Education, Culture, Sports, Science and Technology’s “Need-Based Program for Area Studies: Middle East within Asia”
Haidar Fraihat (National Information Technology Center, Jordan) and Ikhlas Arank (National Information Technology Center, Jordan)
- 121st (April 13, 2010)
Industrial Organization and Labor Economics Workshop
Yukako Ono (Federal Reserve Bank of Chicago), “Incomplete Information and the Timing to Adjust Labor: Evidence from the Lead-Lag Relationship between Temporary Help Employment”
- 122nd (April 19, 2010)
Global COE Special Seminar
Augusto Ruperez Micola (Universitat Pompeu Fabra, Barcelona), “The Emergence of Biofuels and the Co-Movement between Crude Oil and Agricultural Prices”
- 123rd (April 27, 2010)
Industrial Organization and Labor Economics Workshop
co-organized with the Tokyo Center for Economic Research (TCER) Seminar
Youngkwan Kwon (University of Science and Technology), “Open Innovation - New Empirical Evidence of its Impacts on Innovation Performance of SMEs from Korea”
- 124th (May 11, 2010)
Workshop on International Trade and FDI
co-organized with the Japan Society for the

- Promotion of Science (JSPS) Invitational Training Program for Advanced Japanese Research Institutes, the Industrial Organization and Labor Economics Workshop, and the Center for Research on Contemporary Economic Systems
Olena Ivus (University of Prince Edward Island), "Stronger Patent Protection: Quantity, Price, and Variety Response of Exports"
125th (May 17, 2010)
Special Lecture at Hitotsubashi University
Şevket Pamuk (Ataturk Institute for Modern Turkish History/European Institute, London School of Economics and Political Science), "Ottoman Historical Statistics and the Estimation of Per Capita GDP for the Ottoman Empire and Turkey from 1820 to 1950"
126th (May 19-21, 2010)
Asian Historical Economics Conference
co-organized with Asian Historical Economics Conference (AHEC) and the Centre for China in the World Economy (CCWE), Tsinghua University
127th (May 25, 2010)
Economic Development Workshop
co-organized with the Industrial Organization and Labor Economics Workshop, the Workshop on International Trade and FDI, the Center for Research on Contemporary Economic Systems, and the TCER Seminar
Daniel Bernhofen (University of Nottingham) and John Brown (Clark University), "A Ricardian Factor Content Characterization of the Gains from Trade: Evidence from Japan's Opening Up"
128th (June 1, 2010)
Industrial Organization and Labor Economics Workshop
co-organized with the TCER Seminar
Tina Kao (Australian National University) and John Brown (Clark University), "Optimality of Non-fault Medical Liability Systems"
129th (June 6, 2010)
9th Global COE Research Workshop
Takeshi Nishimura (Hitotsubashi University), "Incomplete Procurement Contracting with Risk-Averse Agent"
130th (June 15, 2010)
Industrial Organization and Labor Economics Workshop
co-organized with the TCER Seminar
Ken Yamada (Singapore Management University), "Intertemporal Substitution in Time Allocation of Married Women"
131st (June 18, 2010)
Economic Statistics Workshop
Kazuhiko Shinki (Wayne State University), "Asymptotic Theory for Fractionally Integrated Asymmetric Power ARCH Models"
132nd (June 22, 2010)
Workshop on International Trade and FDI
co-organized with the Center for Research on Contemporary Economic Systems and the International Exchange Seminar
Ian Wooton (University of Strathclyde), "The Gains from Preferential Tax Regimes Reconsidered"
133rd (June 26-27, 2010)
6th Annual Meeting of the Asia Pacific Trade Seminars (APTS)
held at Osaka University
134th (June 29, 2010)
Industrial Organization and Labor Economics Workshop
co-organized with the TCER Seminar
Shinya Kinukawa (Komazawa University), "Bargaining in Technology Markets: An Empirical Study of Biotechnology Alliances"
- Past Seminars
http://gcoe.ier.hit-u.ac.jp/english/events/past_seminars/index.html

Awards

2010 Japan Academy Prize and Spring 2010 Medal with Purple Ribbon

Professor Emeritus Osamu Saito of Hitotsubashi University, Visiting Fellow of the Global COE Hi-Stat Program (G-COE Hi-Stat) and the leader of its predecessor, the 21st Century COE program “Research Unit for Statistical Analysis in the Social Sciences,” received the 2010 Japan Academy Prize. The award-winning study was published in his book, *Economic Development in Comparative and Historical Perspectives* (in Japanese; Iwanami Shoten, 2008). He was also awarded the Spring 2010 Medal with Purple Ribbon from the Cabinet Office of the Japanese Government for his outstanding work on the economic and population history of Japan in

comparative perspective.

34th Small and Medium-Sized Enterprise (SME) Research Awards

Professor Hiroyuki Okamuro, G-COE Hi-Stat Program Member, won the 34th Small and Medium-Sized Enterprise (SME) Research Award for his book, *Economic Analysis of Technological Collaboration* (in Japanese, Doyukan, 2009). Professor Tsutomu Watanabe, G-COE Hi-Stat Program Member, also received the 34th SME Research Award for his book, *Corporate Finance for Small and Medium-Sized Enterprises* (in Japanese, authored with Ichihiro Uesugi; Nikkei Publishing, 2008).

Ph.D. Conferments (Economics, Hitotsubashi University)

Underlined Chief Supervisors are G-COE Hi-Stat Program Members.

The original title of dissertations in Japanese is given italics. Titles in square brackets are provisional translations by the editorial team of the *Global COE Hi-Stat Newsletter*.

FY2008

Michiru Sawada

Dissertation Title: “*Kinyu-kiki no jissyo-bunseki*” [The empirical analysis of financial crises]

Date of Award: June 2008

Chief Supervisor: Tsutomu Watanabe

Ho Il Moon (FY2008-2009 COE Researcher)

Dissertation Title: “*Chosen-minshushugi-jinmin-kyowa-koku no jinko-hendo-bunseki: jinko-kodo-henyo no jittai to sono yoin*” [An analysis of population changes in North Korea: Changes population developments and their causes]

Date of Award: October 2008

Chief Supervisor: Osamu Saito

Kohei Aono

Dissertation Title: “*Kabushiki-shuekiritsu ni kansuru makuro fainansu bunseki*” [A macroeconomic and financial analysis of stock profitability]

Date of Award: October 2008

Chief Supervisor: Tokuo Iwaisako

Koji Sakai

Dissertation Title: “*Kinyu-shisutemu to ginko-kodo ni kansuru jissyo-bunseki*” [Empirical analyses of the financial system and bank behavior]*

Date of Award: January 2009

Chief Supervisor: Tsutomu Watanabe

Yasuhiro Arai (FY2009 COE Researcher)

Dissertation Title: “Economic Analysis of Copyright Protection”

Date of Award: March 2009

Chief Supervisor : Akira Okada

Frisca Parulian

Dissertation Title: “The Estimation and Issues of Indonesia Personal Income Tax Compliance and Tax Office Efficiency”

Date of Award: March 2009

Chief Supervisor: Motohiro Sato

Yessica C. Y. Chung

Dissertation Title: “The Role of Board of Directors in Japan: The Empirical Investigations of Competition and Governance”

Date of Award: March 2009

Chief Supervisor: Yukinobu Kitamura

Ryuichiro Tsuchiya (FY2008 COE Young Researcher)

Dissertation Title: “On the Social and Human Capital of Entrepreneurs in Taiwan”

Date of Award: March 2009

Chief Supervisor: Shinkichi Taniguchi

FY2009

Kazuyasu Sakamoto

Dissertation Title: “*Oyako-kankei no keiryō-keizai-bunseki – 1990-2000 nendai no chuki oyako-kankei ni tsuite*” [An econometric analysis of parent-child relationships: Medium-term parent-child relationships in the 1990s and 2000s]

Date of Award: May 2009

Chief Supervisor: Yukinobu Kitamura

Manabu Ozeki (FY2008-July 2009 COE Researcher; August 2009-March 2010 Assistant Professor, Institute of Economic Research)

Dissertation Title: “*Senzen-nihon no noson noka no kanjo-taikei kara mita shohi no jittai – 1890-1910 nendai no chosonze to 1930 nendai no*

noka-keizai-chosa ni yoru shiryōonteki apurochi”

[Consumption behavior of Japanese farm households during the pre-war period from an accounting

perspective: An approach based on historical records using the survey on the current status and future perspectives of villages for the 1890s-1910s and farm household survey micro-data for the 1930s]

Date of Award: June 2009

Chief Supervisor: Osamu Saito

Tokihiko Settsu (FY2008-2009 COE Researcher)

Dissertation Title: “*Kindai-nihon no keizai-hatten to shogyo sabisugyo*” [Commerce services and the economic development of modern Japan]

Date of Award: June 2009

Chief Supervisor: Osamu Saito

Seiichi Eguchi

Dissertation Title: “*Nihon senkanki ni okeru shokuryo-hi shishutu – juyo-gawa to ryutsu-gawa kara*” [Food consumption expenditure in Japan during the inter-war period: Analysis from the demand-side and the distribution-side]

Date of Award: September 2009

Chief Supervisor: Masahiro Sato

Shiba Suzuki (FY2008-2009 COE Young Researcher)

Dissertation Title: “Essays on Asset Prices and Economic Welfare in Endogenous Incomplete Market Models”

Date of Award: September 2009

Chief Supervisor: Makoto Saito

Kazuya Wada (FY2008-2009 COE Young Researcher)

Dissertation Title: “*Tojokoku-kaihatsu ni okeru jiyu no yakuwaru*” [The role of freedom in development in developing countries]

Date of Award: September 2009

Chief Supervisor: Takashi Kurosaki

Fabien Durringer (FY2008 COE Young Researcher)

Dissertation Title: “An Analysis of the Trilemma since the 1970s: Existence, Performance and Choice”

Date of Award: November 2009

Chief Supervisor: Kyoji Fukao

Akiyuki Tonogi

Dissertation Title: “*Daikibo POS deta wo mochiita kakaku-hendo no jissho-bunseki*” [Empirical analysis of price changes using large-scale POS data]

Date of Award: November 2009

Chief Supervisor: Naohito Abe

Yoshimasa Komoriya (FY2008 COE Young Researcher)

Dissertation Title: “Essays on Multinational Enterprises and Firm Heterogeneity”

Date of Award: December 2009

Chief Supervisor: Jota Ishikawa

Shoko Nakano

Dissertation Title: “*Commodity derivatives ni okeru forward discount bias: goriteki-kitai-heikin risk premium ni okeru kozo-henka*” [Forward discount bias in commodity derivatives: Structural changes in the average risk premium with rational expectations]

Date of Award: December 2009

Chief Supervisor: Tokuo Iwaisako

Nopprach Somsupa (FY2009 COE Young Researcher)

Dissertation Title: “Empirical Studies on the Asian Automotive Industry: Location Choice, Supplier Selection, and Comparative Advantage”

Date of Award: February 2010

Chief Supervisor: Kyoji Fukao

Nozomu Muto

Dissertation Title: “Strategic Complexity and Efficiency in Games with Sequential Interactions”

Date of Award: March 2010

Chief Supervisor: Akira Okada

Kaname Miyagishima (FY2008-2009 COE Young Researcher)

Dissertation Title: “*Kikai no hyoka to bunpa*” [The evaluation and distribution of opportunities]*

Date of Award: March 2010

Chief Supervisor: Naoki Yoshihara

Toshihiro Tsuchihashi (FY2008-2009 COE Young Researcher)

Dissertation Title: “Pricing under Asymmetric Information: Advertisements and Internet Auctions”

Date of Award: March 2010

Chief Supervisor: Akira Okada

Takahiro Ito (FY2008 COE Young Researcher)

Dissertation Title: “Development, Labor Markets, and Household Behavior in Rural India”

Date of Award: March 2010

Chief Supervisor: Takashi Kurosaki

FY2010

Shim Jungwook (FY2009-2010 COE Researcher)

Dissertation Title: “*Nihon no dozoku-kigyō: chōki data set (1955-2000) wo mochiita jissho-bunseki*” [Family firms in Japan: Empirical analysis using a Japanese long panel data set (1955-2000)]

Date of Award: June 2010

Chief Supervisor : Hiroyuki Okamuro

Masato Nishiwaki (FY2008-June 2010 Research Assistant; June 2010-present COE Visiting Young Scholar)

Dissertation Title: “Essays on Empirical Models of Strategic Interactions in Industrial Organization”

Date of Award: June 2010

Chief Supervisor: Hiroyuki Odagiri



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