

Topic-Setting Program to Advance Cutting-Edge  
Humanities and Social Sciences Research  
(Global Initiatives)

Progress Report  
(Summary of Final Report)

[Multi-Dimensional Dynamic Analysis of Gender Equality and the Role of the Family  
in Internationally Comparable Data]

Core-Researcher: Yoshio Higuchi

Institution: Keio University

Academic Unit: Faculty of Business and Commerce

Position: Professor

Research Period: FY 2013 – FY 2016

## 1. Basic information of research project

Research Area	International Comparison on the Family System and Gender Equality
Project Title	Multi-Dimensional Dynamic Analysis of Gender Equality and the Role of the Family in Internationally Comparable Data
Institution	Keio University
Core-Researcher (Name, Academic Unit & Position)	Yoshio Higuchi, Faculty of Business and Commerce, Professor
Project Period	FY 2013 – FY 2016
Appropriations Plan (¥)	FY 2013      4,969,000 JPY
	FY 2014      10,000,000 JPY
	FY 2015      8,400,000 JPY
	FY 2016      6,631,000 JPY

## 2. Purpose of research

The purpose of this research is to verify how gender roles in companies and households have changed in a society with economic globalization, a changing industrial structure, a decreasing birthrate, and an aging population, and to verify how the roles of each gender has changed in family formation, between household members, and especially in income structure, childcare, home education, and nursing care. Then, recommendations are made on the state of employment, education, local policy, social service policy, tax and social security systems, and social and economic policy based on a new multilateral approach with endogenized attitude trends toward the role of policy evaluation and the role of policy from the standpoint of dynamics, using existing public statistics and panel data (micro-longitudinal studies) in various countries including Japan, new longitudinal studies built in this study, cross-sectional studies, and experimental data. These studies are expected to offer useful suggestions for policy-making not only in Japan but also in other Asian countries with a declining birthrate and aging population and in the United States and Europe. In addition, this report is significant in that it sheds light on the social and economic significance of gender equality through collaboration in research projects by the Research Institute of Economy, Trade and Industry (principal investigator: Yoshio Higuchi), which continues to analyze the impact that utilizing female human resources at companies has on improving productivity and competitiveness.

Objectives and significance of the International Network-building/Coordination Group's research: By building an international network linking its entire body of research, this group constructed a dataset including data on Japan that can be used for international comparative studies, which is necessary for achieving the objectives of this research. It is necessary to unify the definitions of variables as much as possible particularly when conducting international comparative studies. Both the conversion of panel data from Japan and the construction of new datasets are significant because they enable international comparisons to be conducted through cooperation with many overseas researchers.

Objectives and significance of the Gender Equality Group's research: (1) The group analyzed the impact that the following trends have on family formation and the economic and temporal division of duties: trends in the gender employment structure and way of working; trends in the presence of employment, work hours, household duties, and childcare hours; increasing employment with long work hours, transfers, and unlimited work, and non-permanent employment; and the bipolarization of the labor market. The group also searched the literature on the efficacy of work-life balance policy; childcare, nursing care, and parental leave systems; Japan's Positive Action policy; and quota systems. (2) They analyzed the impact that trends in the way men and women work and time allocation and enhanced childcare and medical services have on marriage, childbirth, and divorce, along with family systems such as living with or near parents. (3) They analyzed the impact that school education and human resource development in various countries have on the attitudes of men and women toward employment, skill formation, and employment conditions.

Objectives and significance of the Family System Group's research: This group aimed to understand the role that family can play as one of the social systems in the "wing reinforcement" policy, and how policy is effective. In clarifying these points, there is significance in testing models using international questionnaire surveys and experiments based on a new endogenous utility model and in researching how altruism toward children and the elderly and diligence are formed within the home in different cultures.

Objectives and significance of the Job Satisfaction Group's research: In Japan, past surveys have shown that from the beginning a high proportion of women did not want employment. Consequently, the Job Satisfaction Group analyzed data on policies for improving the employment rate of women taking into account the time that men and women spend on household duties in Japan. The results showed that the Japanese custom of working long hours impedes women from working and men from participating in childcare. These analysis results were presented at a seminar held at the Cabinet Office's Economic and Social Research Institute, a National Institute of Population and Security Research seminar, and a Japanese Economic Association conference. A study compiling a portion of research results was also published as a Cabinet Office discussion paper.

### 3. Outline of research (Including study member)

Outline of research of the International Network-building/Coordination Group: The group uses multiple datasets in its research. One set is household panel data from eight countries (United Kingdom, Australia, South Korea, United States, Russia, Switzerland, Canada, Germany) from the Cross-National Equivalent File (CNEF), which enables international comparisons. Inviting Associate Professor Dean Lillard, the group began research to convert the "Japan Household Panel Survey" (called the JHPS since 2004), which is conducted by Keio University using CNEF data, into the CNEF definitions and format necessary to enable international comparison. CNEF data includes household-related items, household income, labor-related items (wages, working hours), health, and life satisfaction. The group held joint international workshops in 2013 and 2014, which contributed to building an international network for this study.

Outline of research of the Gender Equality Group: In the Gender Equality Group, in terms of building an international network, principal investigator Higuchi led collaborative research with Professor Jane Waldfogel and Professor Nachum Sicherman of Columbia University in the United States. In this study, against a backdrop

of advancing technical innovation and continuing globalization of the economy continues, this group investigated the impact that trends in reemployment associated with women leaving their jobs due to childbirth and childcare have on various trends in female employment rates in both the United States and Japan and on income disparities between households. While the obligation for companies to provide maternity (childbirth) leave was legislated in 1993 under U.S. federal law, nothing has been legislated with regard to a system for providing childcare leave. As a result, many women in the past have, on the occasion of childbirth, left their jobs for a short period of time and then returned to their job, or returned to employment at another company. However, over the last 10 years an increasing number of women have been observed to give up on reemployment and leave the labor force, leading to a fall in the labor force participation rate because of the impact of staff cutbacks due to corporate overseas transfers and the development of the Internet of Things, and an economic downturn; and also because of a decrease in the number of companies who engaged in mid-career hiring due to the impact of longer lengths of service by men. This is leading to a growing income disparities between households as these impacts are especially pronounced among unskilled women with a low level of education. Meanwhile, in Japan, following revisions to the Childcare Leave Law and Employment Insurance Law, expanded utilization of childcare leave, increased rates of maternity leave payments, longer leave, and a concurrent increase in job seekers have led to a rise in the continuous employment rate and a fall in turnover. Even for women who once left their job, this has subsequently served to increase the reemployment rate and curb the rising income disparity due to decreasing householders' income. However, in contrast to the fact that many women who are continuously employed return to their jobs after childbirth as full-time workers, many women who have been reemployed are only part-time workers so the economic loss from leaving one's job due to childbirth is unavoidably high. Differences in the spread of this type of childcare leave system in the United States and Japan have inverted the female labor participation rate in the two countries and led a situation in which the labor participation rate of American women has been lower than that of Japan in recent years, even leading to discussion of legislating the corporate provision of childcare leave in the United States as well.

In addition, from the household panel data of eight countries (United Kingdom, Australia, South Korea, United States, Russia, Switzerland, Canada, Germany) based on the internationally comparable Cross-National Equivalent File (CNEF), we have acquired the Korean Labor Income Panel Study (KLIPS) from South Korea, combined it with the "Japan Household Panel Survey" (JHPS), and analyzed them. More specifically, team member Risa Hagiwara analyzed the relationship between subjective public welfare, income-earning, childcare, education, and divorce within households, and found that the difference in subjective public welfare between married couples has an impact on deciding whether to divorce. Furthermore, principal investigator Higuchi and his team conducted a number of studies based on international comparisons. The first study used internationally comparable published statistics from developed countries to conduct an analysis of wages and employment to understand the factors in common between countries and the Japan-specific factors that lie behind such trends. The second study analyzes the relationship between the increase in non-permanent workers and income disparity using the JHPS, and comparing its results with analytical results using panel data from OECD countries. The third study used data such as JHPS panel data to analyze what kind of impact economic constraints (wages and type of employment) and time constraints (commuting time, household duties, child-rearing time, etc.) have on women in terms of marriage, childbirth, and employment behavior. Furthermore,

principal investigator Higuchi mutually shared information at the seminar entitled “Study on the Effects of Diversity and Work–Life Balance”, which Higuchi led at the Research Institute of Economy, Trade and Industry and was also attended by Isamu Yamamoto and Kazuma Sato from the Gender Equality Group.

Outline of research of the Family System Group: The group constructed an experimental dataset to conduct an international comparison by conducting in the United States an experiment that had been carried out in Japan to test the cultural transmission model of persistence from parent to child targeting parent couples. The previous study in Japan was conducted by Akabayashi et al. In addition, centering on the Family System Group, all groups in this project participated in an online questionnaire survey conducted in Hong Kong, yielding data from 2,000 men and women between the ages of 20 and 69 years. Based on these studies, we are continuing to determine models used when analyzing policy based on a global view and theoretical models of cultural transmission.

Outline of research of the Job Satisfaction Group: This group clarified the problems that women experience with working while also being responsible for household duties and childcare by using individual data from a questionnaire survey to conduct a quantitative analysis, including subjective data, on topics such as the impact of working hours on fears of dying from overwork. As a result, it was found that long work hours have the potential to obstruct women from social progress in various ways. Also, companies’ understanding toward childcare and nursing care was found to significantly reduce women’s workload. As a result, redressing long work hours and companies’ support for both childcare and nursing care were found to be important in order for women to be active and continue working. While the main results obtained by this group have been widely published at colloquia and seminars, and in the public sphere as a Cabinet Office discussion paper, results in the Japanese language are currently being translated into English. In the future, this group would like to work proactively to present the results at international conferences and submit them to English–language publications.

To contribute to the globalization of science in Japan, principal investigator Higuchi visited a number of international collaborative research partners in 2014, held meetings on the direction of future research, and simultaneously coordinated between groups.

Study Member

Research Role	Name	Institution / Academic Unit / Position	Research Unit
Core–Researcher	Yoshio Higuchi	Keio University • Faculty of Business and Commerce • Professor	Research Managing Director
Group Leader	Colin McKenzie	Keio University • Faculty of Economics • Professor	International Network–building/ Coordination
Member	Dean Lillard	Ohio State University • Associate Professor	International Network–building/ Coordination

Group Leader	Kazuma Sato	Takusyoku University • Faculty of Political Science • Associate Professor	Gender Equality
Member	Isamu Yamamoto	Keio University • Faculty of Business and Commerce • Professor	Gender Equality
Member	Kayoko Ishii	Keio University • Graduate School of Business and Commerce • Project Lecturer	Gender Equality
Member	Risa Hagiwara	Meikai University • Faculty of Economics • Assistant Professor	Gender Equality
Member	Kazuyasu Sakamoto	Gunma University • Faculty of Social and Information Studies • Associate Professor	Gender Equality
Member	Ryoutarou Fukahori	Kanazawa Gakuin University • The Faculty of Business Administration and Information Science, Department of Business • Assistant Professor	Gender Equality
Group Leader	Masao Ogaki	Keio University • Faculty of Economics • Professor	Family System
Member	Hideo Akabayashi	Keio University • Faculty of Economics • Professor	Family System
Member	Fumio Ohtake	Osaka University • Institute of Social and Economic Research • Professor	Family System
Member	Naoko Okuyama	Osaka University • Graduate School/School of Economics • Visiting Research Scholar	Family System
Member	Kohei Kubota	Yamagata University • Faculty of Education, Art and Science, Department of Education, Art and Science • Associate Professor	Family System
Group Leader	Akiko Kamesaka	Aoyama Gakuin University • Department of Business Administration • Professor	Job Satisfaction
Member	Tadashi Yagi	Doshisha University • Faculty of Economics • Professor	Job Satisfaction
Member	Toshiya Murai	Kyoto University • Faculty of Medicine • Professor	Job Satisfaction
Member	Takuya Ishino	Kanazawa Seiryu University • Faculty of Economics • Associate Professor	Job Satisfaction
Member	Teruyuki Tamura	Keio University • Advanced Research Centers • Project Research Associate	Job Satisfaction

#### 4. Research results and outcomes produced

Research results and outcomes of the International Network-building/Coordination Group: In 2013 and 2014 this group provided an opportunity for Japanese researchers to deepen their understanding of the research trends of overseas researchers by hosting a joint international workshop in coordination with the Job Satisfaction Group, and provided an opportunity for research meetings and exchange by creating an environment for collaboration with in-country researchers, including young researchers. In 2015, the group contributed to holding a seminar, to which they invited Professor Nachum Sicherman, and also contributed to holding meetings on approaches to behavioral research in this project and testing specific-use data, estimation methods, theoretical hypotheses, and the like in coordination with the Gender Equality Group.

Research results and outcomes of the Gender Equality Group: The Gender Equality Group has already published a number of research results led by principal investigator Higuchi. More specifically, they have presented the following research results: (1) Yoshio Higuchi, Kazuma Sato (2015). “Commonalities in Employment, Wage and Inequality Data of Developed Countries: Is Japan Unique? [in Japanese]”, No. 58-1; (2) Kayoko Ishii, Yoshio Higuchi (2015). “Hiseiki rōdō no sankā to shotoku kakusa: shotoku kakusa ni okeru kojīn to setai – kokusai hikaku ni miru nihon no tokuchō–” (Participation of Non-Permanent Workers and Income Disparity: Individuals and Households in Income Disparities: Japanese Characteristics as Seen in an International Comparison), Keio Business Review, No. 58-3; (3) Yoshi Higuchi, Kazuyasu Sakamoto, Risa Hagiwara (2016). Economic and Time Constraints on Women’s Marriage, Childbirth and Employment, and Effects of Work-Life Balance Policies: Empirical Analysis Using Japanese Household Panel Surveys [in Japanese], Keio Business Review, No. 58-6; (4) Yoshio Higuchi, Kayoko Ishii, Kazuma Sato. Income Inequality and Income Change in Japan: Dynamic Approach through International Comparison and Time-series Comparison [in Japanese], Keio Business Review, publication forthcoming in No. 59-2; (5) Yoshio Higuchi, Kazuyasu Sakamoto, and Risa Hagiwara (2016). “The Constraints on Women’s Marriage, Childbirth and Employment, Effects of Work-Life Balance Policies: Empirical Analysis Using Japanese Panel Surveys”, Keio Business Review, No. 51-1. Among the above research results, (1), (2), and (4) use internationally comparable data from Japan and overseas, so they will likely contribute to promoting research that targets Japan for comparison. In addition to these studies, team member Sato has analyzed the relationship between marriage and health using JHPS data, and has submitted the study to an English-language publication.

In addition to the work discussed above, in 2016 team member Hagiwara presented a paper titled “The Gap of Subjective Wellbeing and Divorce in a Married Couple: Comparative Study using Household Panel Data in Japan and Korea” at the International Society for Quality of Life Studies (ISQOL) Annual Conference held Aug. 25-27, 2016 at Seoul National University. Furthermore, these data on trends in family and work in Japan and the United States were adopted as a common theme at the Association for Public Policy Analysis and Management (APPAM) International Conference held on July 13-14, 2016, at the London School of Economics, the organizing committee for which was chaired by Professor Jane Waldfogel and was planned and attended by Higuchi as an organizing committee member. Then, analysis of the current situation and research reports for various countries were presented.

Research results and outcomes of the Family System Group: The group acquired questionnaire survey data in Hong Kong through an international comparative study on parental discipline and children’s diligence. We conducted an experimental study in the United States targeting parent couples and acquired data. The results thus far have been the acquisition of these data and the context and know-how necessary for conducting surveys in Hong Kong and the United States. In order to obtain intertemporal data, the group needs to acquire data again and, while research including positive analysis of data is incomplete, research using these data in the future is expected to have a fundamental ripple effect on studies involving normative economic analysis of impacts on the overall economics of family systems.

Research results and outcomes of the Job Satisfaction Group: Akiko Kamesaka, the leader of the Job

Satisfaction Group, cohosted an international conference held at the School for Advanced Studies in the Social Sciences (EHESS) in Paris, France, together with group member Tadashi Yagi, and presented some of her own research results at the conference in collaboration with group member Teruyuki Tamura. These research results have also been included in a book published by Springer that included an English manuscript written by group member Toshiya Murai. In addition, the group met with Professor Andrew Clark on the occasion of the conference, and a study conducted and written by the group was published in *Education Economics* which was jointly authored by Clark, Kamesaka, and Tamura. This paper showed that in Japan the higher education one has, the easier research results are to obtain in the future. Kamesaka also presented two studies at the International Sociological Society, held only once every four years. One of these studies was jointly authored by Professor Yoshinori Kamo, an overseas research partner specializing in sociology of the family. The results of this study done in collaboration with Professor Kamo are planned to be published in an English-language book, and the authors are currently working toward publication. Kamesaka also analyzed the impact of working hours on Japanese employment in collaboration with group member Tamura. These results have shown that long work hours make it difficult for women to engage in household duties, childcare, and employment at the same time, and make it difficult for men to participate in childcare. These results have been compiled in Japanese in a Cabinet Office discussion paper and are currently being translated into English. This study has already received coverage by Bloomberg News and The Wall Street Journal, and parts of it have already been published in articles. Since October 2016, the study results have also been referenced on television programs, including on shows aired by BS Japan, and the results are scheduled to be used in program production.