



Research Unit for Statistical and Empirical Analysis in Social Sciences

Establishment of an empirical research base that is open to the world and that integrates data, researchers and on-the-job training (OJT)



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Hitotsubashi University's research strength — historical background

Since around the time of World War I, Hitotsubashi University has been engaged in research that has had an impact on the humanities, social sciences and the entire range of social policies in Japan. The first stream was created by socio-economic policy studies initiated by Tokuzo Fukuda. They put emphasis on the support by mathematical economics and empirical evidence, despite their liberal and practical aspects. The second stream consisted of empirical research in macroeconomics and business administration originated by Teijiro Ueda. Empirical research in macroeconomics has come to fruition in the form of a series of historical economic statistics of the Institute of Economic Research (IER). In the area of business administration, a tradition of empirical research on corporate behaviors has been established.

Apart from these, Hitotsubashi University has been leading Japan's academic arena in civilization and economic history studies, international economics, and empirical and practical research into the Asian and Chinese economies. The first and second streams have been passed down to two 21st Century Center of Excellence (COE) programs run by the IER and the Graduate School of Economics, the Normative Evaluation and Social Choice of Contemporary Economic Systems and the Research Unit for Statistical Analysis in Social Sciences, and to another 21st Century COE program by the Graduate School of Commerce and Management called Dynamics of Knowledge, Corporate System and Innovation.

A center of empirical research in social sciences that is open to the world

This global COE Program, Research Unit for Statistical and Empirical Analysis in Social Sciences, inherits Hitotsubashi University's tradition of what is described by

Shiro Masuda as “academism that has grown in the fertile soil of practical study.” The basic concept of the program is indicated in the title. The significance of empirical research in social sciences can be compared to that of experiments in natural sciences. Of utmost importance for such empirical research is the availability of micro-data and long-term statistics. It is regrettable, however, that Japan and other Asian countries lag behind other regions in data development. Taking over many of the large number of researchers involved in the two 21st COE programs operated by the IER and the Graduate School of Economics, and putting the statistical data archive on center stage, the Research Unit aims at conducting empirical research that capitalizes on the archive, developing statistical methods and economic theories directly related to data, and creating a new database.

Postgraduate students have access to OJT education as they take part in empirical research. The Research Unit thus opens the way for training postgraduate students to write academic papers that attract international recognition with the use of innovative data collection. Superior data attracts researchers from around the world. As a base that is open to the global community of researchers, the program also aims to foster overseas researchers studying in Japan and Asia.

To sum up, the objective of the program is to establish an empirical research base that is open to international researchers and that integrates a statistical data archive, researchers and on-the-job training.

Following the achievements of the two 21st Century COE programs

Micro-data refers to data on firms, households and other players. The utilization of micro-data helps illustrate, for instance, that the closure of a factory that is highly productive constitutes a major obstacle for productivity improvement. As a result, it is possible to suggest that improvement in Japan's productivity necessitates a policy that sustains highly productive plants.

The use of micro-data is vital to world-class studies. Northern Europe is known for its advanced use of data. Researchers in the region conduct innovative analyses by combining corporate data and social security data and publish a succession of striking research findings. There is



always a high level of need for carrying out studies using new frontiers of data.

When using micro-data, it is requisite to take seriously several factors, including the protection of privacy of individuals and businesses. The Research Unit creates an environment that allows many researchers and postgraduate students to use micro-data and long-term statistics without anxiety in this respect in a bid to further stimulate research and education activities.

As a matter of fact, the 21st Century COE program, titled the Research Unit for Statistical Analysis in Social Sciences, has already made some achievements in collaboration with the Ministry of Internal Affairs and Communications. Japan's first governmental statistical micro-data center has been set up to make governmental statistical micro-data available to those researchers across the country who filed applications in response to the public notice. It has offered the service to more than 100 researchers.

In addition, a project for the creation of Asian historical economic statistics and the construction and updating of the Japan Industrial Productivity (JIP) Database for measuring the country's industrial structure and productivity are implemented jointly with the Research Institute of Economy, Trade and Industry (RIETI). The JIP Database is utilized by Japan's Cabinet Office, the Organisation for Economic Cooperation and Development (OECD), the International Monetary Fund (IMF) and other institutions for their materials and reports and is highly regarded as Japan's leading productivity database.

On the other hand, the other 21st Century COE program, called Normative Evaluation and Social Choice of Contemporary Economic Systems, conducted normative and empirical research on firms, markets and the international economic system and many other economic systems in close partnership with overseas researchers. The scope and accuracy of empirical research will be enhanced by participation

of front-line researchers who played important roles in these two programs, in the Research Unit.

Positive use of education Infrastructure of the Graduate School of Economics

The education infrastructure of the Graduate School of Economics is another advantage of the Research Unit. The Graduate School has been accumulating achievements in education by developing buildup-type course work and by placing group guidance in workshops and examinations for admission to doctoral courses under strict learning process control. Moreover, activities under the two 21st Century COE programs included several new attempts, including financial support for postgraduate students and intensive seminars where papers presented were chosen based on an open competition from all over the country, commonly known as *Insei Koshien* (where *Insei* means postgraduate students and *Koshien* refers to the semi-annual baseball tournaments in Japan played by high schools nationwide culminating in a final showdown at the Hanshin Koshien Stadium). They have resulted in great educational achievements. For example, a total of 35 articles contributed by postgraduate students have been published in refereed academic journals in the past two years alone.

Seeking excellent young academics from Japan and abroad

We will now move on to development of postgraduate students and young academics. Participation in database build-

ing and empirical research is an OJT education opportunity that is ideal for the development of human resources. There are also opportunities to enter the open competition *Insei Koshien* and to join international workshops that take place at least four times a year. The Research Unit is planning to hold four or more series a year of diverse lectures delivered by invited academics. The Program requires postgraduate students to take part in a wide variety of seminars and workshops as well as in overseas surveys and empirical research utilizing the survey findings. They are also subject to occasional check on the course taking status.

As a base that is open to the world, the Research Unit accepts about ten COE Researchers from among the post-doctoral applicants responding to its open call as well as about ten postgraduate students and young academics in domestic and overseas institutions as COE Visiting Young Researchers every year. In this manner, the program seeks to create a highly cosmopolitan research base where a large number of domestic and international researchers always stay to conduct research using the data archive. The program also places a focus on recurrent education for advanced professionals.

As part of financial support activities, the Research Unit employs COE Young Researchers, Research Assistants and Teaching Assistants. Around 15 COE Young Researchers are selected each year by rigorously screening the top 20% of the postgraduate students and approximately 15 Research and Teaching Assistants are hired each year from among the next 20%.

Enrichment and positive disclosure through the data archive

The Research Unit is working positively to enrich the data archive and to make it accessible to outsiders. To protect data confidentiality, it is standard in the US and European countries to provide isolated research laboratories with data access, which are commonly referred to as “clean rooms.” This Program also offers clean rooms for access to governmental statistical micro-data to support residential research activities. At the 2008 Comparative Analysis on Enterprise Data (CAED) Conference on governmental statistical micro-data that took place in Budapest, one leading figure in this domain gave a speech about the ten joys and ten curses of research using governmental micro-data. One of the ten curses is the continual fear of the risk of data leaking. This implies that it is

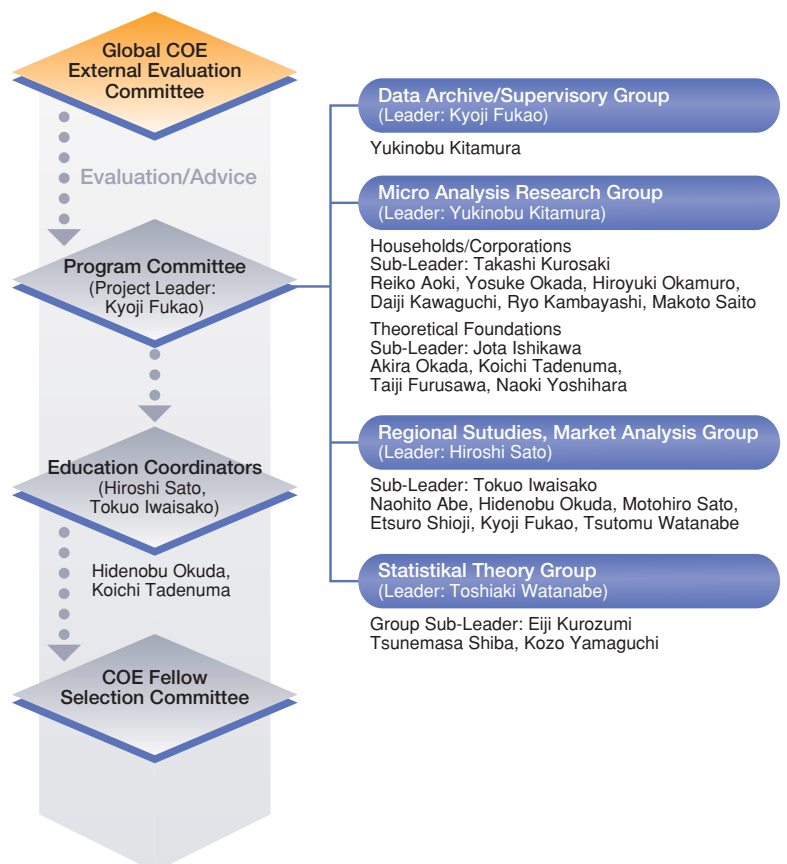
that delicate to handle micro-data.

Incidentally, the project for Asian historical economic statistics, aimed at estimating national income and other indicators of economic activities in 12 countries and regions in Asia in the past century, will go on as a matter of course. It is a large-scale project joined by researchers from around the world, including those from local countries and those from their former suzerain states. What is more, it is currently in the harvesting phase. The first edition for Taiwan is due to be published in December 2008 and it will be followed by editions for South Korea, China, Vietnam, Indonesia and others to be released at the rate of one edition or more per year. The resulting statistical data will also be made available online. The publication requires considerable money and effort on the part of numerous academics. In this sense, this pace of publication would not be possible if the project was not adopted as a global COE Program.

In addition, the JIP Database will commence a comparison with productivity in other Asian economies in collaboration with overseas databases. The Republic of Korea has already disclosed its KIP Database, named after its Japanese counterpart.

The Research Unit will be making a new attempt of co-organizing a consortium with research institutes and governmental authorities in Asian countries that have partici-

◆ Operational framework for the Research Unit



pated in joint surveys to conduct research personnel exchange and joint research and to provide assistance in building of data archives in Asian countries.

Establishing a long-term research structure based on the Global COE Program

The targets to be met by the Research Unit are summarized as follows:

- (1) The cultivation of experts skilled in advanced empirical analyses
- (2) Contribution to society by offering public goods such as access to micro-data and historical statistics
- (3) Publication of findings

The Research Unit aims at developing experts skilled in advanced empirical analyses in their respective disciplines by attracting university researchers, postgraduate students, economists working with government authorities, overseas researchers in Japan and Asia studies and other academics.

With regard to social contribution, the government statistical micro-data and the Asian historical statistics, which have until today been accessible solely to limited researchers, will be an asset shared by the academic world. The Research Unit conducts many different analyses of households and businesses using micro-data and building an

international network for historical statistics, surveys and productivity measurement. Also, it will be making policy suggestions based on empirical evidence obtained from elaborate empirical studies.

The research findings will be disseminated effectively. First, they will be presented as required in international meetings and workshops. There are at least four international meetings and 30 workshops per year on average. Forty articles a year will be published in refereed academic journals and some 70 discussion papers will also be released each year. The Research Unit will aim to publish some six editions in the long-term Asian economic statistics series. Statistical data on history and industrial productivity in Asia will be published on the website.

These activities must be continued and upgraded after the end of the global COE Program. Management of the data archive and support for use of micro-data will be continuously ensured by two permanent bodies, namely the Research Centre for Information and Statistics of Social Science (RCISSS) and the section engaged in micro-data analysis. Hitotsubashi University has pledged to establish an organization for advanced statistical and empirical analysis in social sciences. It will maintain its presence as a base of sophisticated empirical research and education that is open to the world.

◆ Empirical and theoretical research directly related to the rapidly evolving data archive

