## <u>Session Two: How to Develop Quality Statistics That Contribute to Public</u> Needs and Policy Needs

**Mr. Hida:** Thank you very much. Minister Ota, due to her previous engagement, we will be farewell to you at this juncture. We would know like to begin the second session, Statistics Development to Meet the Needs of Society and Economy: How to Develop Quality Statistics That Contribute to Public Needs and Policy Needs. Session two will be chaired by Dr. Kuroda from ESRI. Dr. Kuroda, please.

**Dr. Masahiro Kuroda, President, ESRI, Cabinet Office, Japan:** Good afternoon, everybody. My name is Masahiro Kuroda, President of ESRI. First of all, I would like to thank all of your for your participation in this very important conference and also especially, I would like to express my sincere appreciation to the guests from abroad, the very distinguished guests that we can invite and we have a very good discussion this morning.

I will chair this session. The session is a little bit different topic from the previous panel discussion. In session two, we will talk about how to develop quality statistics and contribute to the public needs and policy needs. As you know already, the Japanese new Statistics Act has some sort of big changes from the previous one. I think one of the biggest important changes of the new law is that official statistics are recognized not only as the statistics for government policy requirements, but also as a public good as social infrastructure for public information, I think. Therefore, that means that the new Statistics Act has to have many problems that have to be challenged.

One of the big things about the circumstance of the economy and society changing recently and very rapidly and globally is that all official statistics have to be adjusted to such kind of changes of the economic situation and the social situation. The second one is the circumstance of the survey or statistics in society is a little bit changing. Sometimes it is very difficult to do a survey in society because of the problem of privacy and other things or so. Therefore, we have to adjust to such kinds of changes or circumstances of the survey. The third one is just the purpose of the new Statistics Act. All the official statistics have to correspond to the needs of policymakers but also we have to adjust to needs from the public and consumers including academia, the business side and the other consumer side. Therefore, such kinds of necessities of reform are very important in this new act.

In this morning, the first session, we learned many experiences from the various countries to reform the statistics systems. I would like to in the second session deepen the discussion more on specific points. First of all, I would like to introduce the distinguished guests in the panels. The first speaker already you know was Mr. Mike Hughes. He was a speaker in the first session. Again, he is Director of National Statistics and Policy Group in the Office for National Statistics. Also, he is a member of the ONS Board.

The second speaker is Ms. Wallman. She is Chief Statistician of the United States. According to my information that I have gotten, during her tenure as United States Chief Statistician, she has increased collaboration among the agencies of the United States statistical systems, fostered improvements in the scope and quality of the national official statistics and strengthened the protection of the confidential statistical information and initiated changes that have made that produce of the system more accessible and usable. I would like to hear from her some experiences in the United States, how to get collaboration among statistical agencies, and how to get some collaboration among academia and business officials, and also how to manage the budget for statistics in the United States. I expect that we can learn many things from her. The final speaker is Mr. Lin Xianyu. He is the Deputy Commissioner of the Statistical Office of China. I know he graduated from Tsukuba University. He is my old friend; he speaks Japanese very well but he will just talk in Chinese and translate it into English and Japanese today.

I asked two discussants. One is you already know, Dr. Paul Cheung. He is the Director of the UN Statistics Division. He already did the keynote speech this morning. And finally, I would like to ask Dr. Omori to be a discussant. He was the Vice President of my institute. Just now he moved to a private company. He had many experiences to estimate the SNA. Therefore, I would like to ask him to be the discussant for that.

I would like to ask the first speaker, Mr. Hughes. Especially, this time you talk about the problem of personnel. Please, thank you.

**Mr. Mike Hughes, Director of National Statistics and Policy Group, ONS, UK:** There was a lot of discussion this morning about the need for Japan perhaps to develop a professional charter. I was invited to say a little bit about the British system. It is by no means perfect but it certainly is a well-established system. You may remember me saying this morning that this was developed by Claus Moser in 1968 and he has gone onto to be the elder statesman of British statistics and his system has gone on to stand the test of time.

What I would like to do is to give you an outline of the structure, tell you something about the organization of the Government Statistical Service, recruitment, training and development, management of the GSS, and some of the things that we are looking to do through initiatives to improve it. Very quickly, this slide is just a quick caption to show you and to reemphasize again the point that we are there not just to meet the needs of government, but to cover business and the population at large as well.

The characteristics of the government statistical service in terms of people: It is about 7,000 staff spread over 40 departments and agencies, of which 1,200 are professionals. The remainder of those people, the 5,800 are administrative staff working for the statisticians supporting them—the essential staff that we need in order to conduct all our surveys and much of our analysis and tabulation work, etc.

What I want to focus on is just the professionals because that is what I think we are really interested in this afternoon. The key points to make is that we have a common structure across all departments, we have a central recruitment process to ensure we are recruiting to the same standards across all the departments, we are working to a common competency framework and common professional standards. Those are the key features of it.

Another characteristic is that over a period of time—through the government's dispersal program to try to move more and more government activity out of London—the GSS in terms of people is now widely spread across the United Kingdom and over 50 percent of the professionals now work outside London. That is quite an important feature because for many people who might want to pursue a professional career in statistics in government but are not attracted to London because of its high prices, etc., the fact that they have the opportunity to work in most of the major regions of the United Kingdom is quite important.

The other thing to say is that one of the key characteristics of the GSS is its mobility across departments. Because these professionals belong to the GSS it is very straightforward and easy for them in their career development to move from one department to another. Just to illustrate the point, in my own career, I stated in Customs and Excise working on sales tax, I went to Defence and did several jobs there, I went back to Customs and Excise to manage the Trade Statistics Office, I went to the Department of Employment and worked on earnings and tourism, I was then the Chief Statistician for Housing in the Department of the Environment and so it goes on. The subject matter has changed each time but the key feature of it was that I was continuously developing my professional skills in a common system.

Just to give you some idea of the structure, simply so that when I talk about certain things you will understand me, the lowest grade that we have is what we call either an Assistant Statistician or a Statistical Officer. I will talk about that separately in a minute. The basic working level is the statistician and typically that statistician will manage a branch producing a key statistics. It may be producing a price index, or it may be producing a particular form of transport statistics, or a particular type of housing statistics. And that statistician will probably have 20 to 30 people working for them.

We have a number of intermediate posts called Senior Statistician and they may manage two or three branches. The first senior management position is Chief Statistician. The Chief Statistician will be managing a division of probably five or six branches and that gives you some idea of the span of responsibility. You move up the stage again, where I am at, where you manage a directorate or a group. I deliberately put the next grade – Director General - in square brackets because it does not exist at the moment in the UK system. However, our National Statistician has recently secured agreement from the Head of the Civil Service to introduce two Director-General appointments in the Office for National Statistics simply because of the enormous workload she faces over the coming years in taking forward the independence agenda I talked about this morning. And then you end up at the top of the tree with the National Statistician who is the head of a department and a permanent secretary in our terminology.

All of these posts are filled by professional statisticians; they are not filled by administrators. It does not mean to say that the top jobs are always filled by an insider, however, and there are lots of examples over the recent decade where they have been filled by an outsider. There are examples of that. Karen Dunnell's predecessor was Len Cook from the Statistical Office in New Zealand. Before him was a man called Tim Holt, who was a professor of statistics at Southampton University. Before that it was Bill McClellan, who went on to be one of Brian Pink's predecessors as the Australian statistician. So we are not necessarily internal all the time, but the key point is that all of these posts are filled by professional statisticians who spent all of their lifetime working in statistics.

The appointments are usually, and certainly at the senior levels, made by selection panels and they are usually filled by competition. So it is a very open and very transparent system. Picking up one of Paul's points that he made today about the situation in Japan, where people rotate, we do actually actively encourage people to go out of the statistical system for a while to get wider experience—whether it is working aboard or whether it is working in a policy post. But the general expectation is that those people are doing that for their own career and wider development and they will come back into the professional cadre to continue their career.

This slide gives you some idea of the models of organizations and the way the system works. It shows that there are different models in different departments and even sometimes different models within departments; but it illustrates how the professional statisticians work. You can have statistical directorates, which are made up of four or five divisions, so that Director of the Directorate as a professional statistician is directly managing all the statisticians in that department. Examples of that are in the Ministry of Defence and the Department of Revenue and Customs at the moment. But the common model nowadays is that there will be a statistical division headed up by a chief statistician working within a policy directorate so that he or she is working alongside their policy colleagues and

reporting to a policy director or sometimes in an analytical directorate where you have the related skills of economics, research and OR with an analytical director. That, from my particular point of view, is probably the best model, where you get the right balance between the statisticians being managed effectively in terms of development of their professional skill and being alongside the policy people to be able to deliver a service.

The next model down is where you put a statistical branch in a policy division. This is where you are, I think, starting to get the potential for the statisticians to be under pressure of coercion because they are actually working to a policy division head. And even more extreme is the situation where occasionally statisticians are what I call bedded out, just put into a policy branch and working there alone. That is not often favored but it is an example of how we work. It is all meant to be very flexible.

Recruitment: as the slide indicates, a common system for all departments is delivered centrally. We have two streams of recruits. We take in about 20 to 30 assistant statisticians a year and these are what we call "fast streamers." These people have gone through a selection process which is equivalent to the management trainees of the blue-chip companies—the top banks, the top legal companies, very high exacting standards. Two days of intense assessment. These people are being selected with an assessment of their potential to reach Chief Statistician level in their career. We do not need many of those every year so that is why we only go for 20 or 30. We would be very lucky if we got more than that anyways because it is a fiercely competitive market in the United Kingdom for top graduates.

The lifeblood of our statistical system, and the bulk of our professional recruitment, is the statistical officers and we take in about 70 or 80 of those a year. They go through the central recruitment process that I talked about and then they get allocated to departments. Some come to ONS and others go to other departments. What we are looking for in that recruitment process is people who have first-class or upper-second honors degrees. They do not have to do solely maths or statistical degrees and we are only looking for degrees with up to 20 percent statistics. We are looking for people who have got relevant experience of statistics in their degree course and a classic case of this is geographers. We have been taking a lot of geographers - who have a wide numerate base - and social scientists also.

We recruit very few people at statistician level because we find that we can recruit sufficient numbers of junior professionals to provide an adequate throughput to the statistician level. Of course we lose people from the system as you do; they move into new professions, they move out of London and find jobs elsewhere in the country. But by taking in sufficient numbers at the junior professional level, we find that we generally do not need to recruit at higher levels.

Training and development. We expect to give Our junior professionals, somewhere between 10 to 15 days a year of training in their first three or four years. That is done trough several different places. We have the National School of Government, which runs a whose series of courses on management development, management training, and a whole raft of general people skills that we expect our junior professionals to acquire.

If individuals have not got a particular statistical skill that they feel they need in a particular job, we have negotiated a package with the University of Southampton to run an MSC course in statistics and that is conducted on a modular basis. So, for instance, a young statistician goes into a job where they need to know about price indices, they can do the module on indices. It takes about a month of a combination of part-time working and time at university. It gives them the opportunity to upgrade their skills quickly in a particular area that their university course has not covered.

But the key element of our training and development—and I am afraid that it is not on the slide and I am sorry for that—we have established grade competency frameworks which set out what we expect individuals at each level to achieve in terms of professional competency. That they get experience across a wide range of different professional skills, from initial design of inquiries and surveys all the way through to analysis and output.

The way that individuals progress is to make sure that in any particular job, they are developing a particular set of professional competencies. Once they exhaust the scope for further development in that post, they should be looking to move to another job to gain experience in competencies they haven't covered already. We manage this through what we call the Continuous Professional Development programme. After an individual has gone through their initial training, staff are expected to log up about 60 hours professional development per annum; that is equivalent to about eight to nine working days of professional development, through attendance on courses, through attendance at conferences (occasionally like this maybe), through jod-shadowing, etcetera.

And the other way we seek to engender professional esprit de corps in the cadre is through a series of annual conferences. So last Thursday and Friday, for example, I was running the Senior Leaders in Statistics Conference for the National Statistician and our Junior Professionals Annual Conference will take place in December. Each time we get very senior speakers to talk on the latest issues of public interest. Clearly, preparing for the new legislation is a very topical issue at present. But it is also an opportunity for the cadre to get together, some 250 - 300 at a time, with a lot of networking and a lot of engagement.

How do we manage all of this? It is done at lots of different levels. A recent development in the UK is that the heads of analysis across government - that is the National Statistician, the Head of Economics the Head of Research and the Head OR are now meeting on a quarterly basis, to address matters of common interests; to make sure that they are all moving in the right direction in supporting government; to make sure that we are all learning from one another. It is very powerful forum.

The way that professional management is undertaken in departments is through the head of profession, the senior statistician, and that person will be responsible for organizing career moves for their staff, to make sure that they are getting the right career opportunities and so on.

I have a small team in the Office of National Statistics called the Statisticians in Government team currently about six staff but it has been agreed that it needs to be increased - and they run all the recruitment, they run all the major conferences, and basically they provide the glue in the system.

Last but not least, I should mention some initiatives we are taking. We are looking very closely at the moment at various things we need to do to improve the system. We are concerned that perhaps we are not devoting as much time as we should to central career management. Certainly, at the top end of the structure, we have got to be doing more to make sure that we are getting people in to the right positions at the right times to be taking over the top jobs. And we need to spend more time on talent spotting well down in the system to make sure that we are picking up the rising stars. We also need to do more work on secondments. You heard me talk about it earlier—making more opportunities for our junior and middle staff to get experience outside government in the private sector, in academia and also opportunities for secondments abroad.

Thank you very much for your attention.

**Dr. Kuroda:** Thank you very much Mike. It was a very interesting presentation. As for Japan, the personnel issue is a very big issue for us and therefore I would like to discuss it more later. As a next speaker, I would like Ms. Wallman to talk about the experience in the United States. The United States also you know about some sort of decentralized system. I think that as management, it is very nice in the United States. I would like to hear about her experiences in the United States.

**Ms. Wallman:** Thank you very much. Good afternoon. I would like to join my fellow panelists here in thanking Mr. Takeuchi and Mr. Kawasaki for inviting us here. I think I was invited by several other people as well. I have never been so well invited. But I am very pleased to be here. This is my first trip to Japan. I feel very welcome. As the Chief Statistician of what is arguably the most decentralized statistical system in the world, I am quite comfortable in a conversation about decentralized statistical activities

and what one might do when that is one's venue for operating a statistical system.

Let me begin by noting that when I am discussing a decentralized statistical system in the US, I really am focusing here on the horizontal sharing of responsibility for statistics at the federal or national level. We do indeed do some vertical sharing with state and local governments in particular areas of statistics but that is not really the focus of my presentation here today. Let me note that the US decentralized system includes about 80 agencies or units that produce some part of our official statistical product. A substantial portion of these statistics is produced by 10 agencies that have statistics as their major line of work. You are probably familiar with our principal statistical agencies, such as Bureau of the Census and Bureau of Economic analysis, which is responsible for the national accounts, our Bureau of Labour Statistics; we also have centers for education and health statistics, for crime, for transportation, and so on.

The heads of some of these agencies are career civil servants, as am I by the way—that is sometimes a question that people have. There are others who are appointed as Presidential appointees. There is no rational I can give you for how that came to be but the fact is that about half of my principal agency heads are serving as political appointees and the other half as career appointments.

About 40 percent of our total budget for statistical work is used by these 10 principal agencies; that would be an amount of about US\$2 billion annually. In addition to that, the other 70 agencies are expending another US\$3 billion on statistical products. What do I mean by those other statistical agencies? Generally, they are either agencies that have reasonability for administering a federal benefit, such as our medical care for the elderly or social security, or they would be agencies that enforce regulations in areas such as the environment. So they are producing statistics if you will as a by-product of their principal missions.

Within our de-centralized system, we have had the position of Chief Statistician for about 70 years. The authorities for that position have most recently been set forth in what we call our Paperwork Reduction Act of 1995. In fact, I am going to talk about the Chief Statistician's three principal authorities in the first half of my discussion with you today. The responsibilities that are assigned to the Director of the Office of Management and Budget and in turn to me as Chief Statistician are quite broad with respect coordinating and overseeing the federal statistical system in the United States.

The Interagency Council on Statistical Policy is not an outside group but rather a group, of the heads of the principal statistical agencies that I chair. Similar to what Brian mentioned this morning, this is a group with whom I consult on a regular basis. We meet monthly and have conversation on issues that cut across the system issues that perhaps one agency is facing but another agency would or should want to know about.

Within our very decentralized system, we have had for many, many decades what I will refer to as a culture of collaboration. This has been essential for carrying out our work, to identify priorities, to establish statistical policies and standards for our system and to evaluate the agencies' compliance with various kinds of guidance that the Office of Management and Budget is responsible for issuing. I would note there that the Interagency Council works closely with me on setting priorities in the system.

There are three principal areas that I wanted to mention in terms of our system before I turn to some discussion of collaboration with the outside. The first is the responsibility that our office has for the development of budgets for statistical programs. In our system—just briefly—the President formulates a budget for the entire executive branch of the government and that budget is put together in the Executive Office of the President in the Office of Management and Budget. That is also where my office is located. Thus, each year various statistical agencies make their proposals through their departments or ministries to the Office of Management and Budget for the kinds of resources they believe are necessary both to continue existing programs and in some cases to have new initiatives in their activities. During this period of time, which has just ended yesterday, the agencies and OMB are in constant conversation to determine how much of what they are proposing will actually be approved by the Office of Management and Budget and sent by the Director of the Office of Management and Budget to the President for his approval.

The fact that budget development takes place in the Office of Management and Budget where my office is located gives me a very good opportunity, together with my staff, to interact in the formulation of the budget and to indicate where we think priorities may need to be shifted, where we may need an infusion of new funds—a key example of that in recent times was our decision to abandon our traditional census long form and instead to begin something we call the American Community Survey to gather that kind of information. This is what we call an initiative. The necessary funding cannot be "borrowed" from somewhere else; we have the opportunity in my office to make the case, if you will, to have that infusion of funding.

The second tool that the Chief Statistician in our system has is the setting of standards for statistical activities. These are standards of various kinds. The first kind of standards is what I will call core standards for statistical surveys. These are basic standards or rules for designing information collections, analyzing data, disseminating information, and so on. Secondly, we issue guidelines for protecting confidential information. As has been mentioned, we do have a new comprehensive law on the protection of confidential statistical information that cuts across all of these agencies that are collecting

information for statistical purposes: not just the Census Bureau, not just BLS and so on. But any agency that is collecting information from respondents under a pledge of confidentially for statistical purposes is subject to the same exact restrictions and requirements including some very big fines and very long prison terms. The third kind of standards is classification standards for statistical information: familiar to you are industry classification and occupational classification; perhaps less familiar are our standards for metropolitan statistical areas, and our standards for data on race and ethnicity.

Data release standards are very important. Here we are talking in particular about our long-standing policies for the release of our principal economic indicators. Those policies have been around for more than 30 years. They were born of a difficult situation, but the standards that were put in place have served us very well since then. These are the standards that very carefully protect pre-release access to information, of which there is very little on the economic indictors, and establish the bright line one hour delay between the time the agency that develops the data releases the information and the time any policy official can comment.

The third key tool that I want to discuss is the approval of all national data collections. This is an authority that we have had since 1942, which basically says that any collection of information that is being promulgated by any federal agency, if it is going to 10 or more anythings—people, households, businesses, universities, state or local governments—must be approved by the Office of Management and Budget. That means that the information collection in the first instance has to be submitted to Office of Management and Budget. Secondly, it must be subject to public comment -- initially a 60-day public comment period, and then the agency proposing it has to take account of any public comments and then send the proposed collection to OMB officially, at which point there is another 30-day public comment period before we are allowed to act. (There are some exceptions if something has to be done on an emergency basis.) Also these collections are approved for a maximum of three years. So every three years, any continuing activity must be resubmitted for this approval process.

This has become a very important mechanism for us, among other things to ensure that the statistical methods being used in information collections are appropriate for the intended uses of the information. It is our tool for monitoring the use of classification systems so that if an agency is collecting something about industry or occupations, for example, we can ensure that the agency is collecting the data in accordance with the standards. And it is a very important tool for us to coordinate collections that are carried out by different agencies across government; in fact, there have been instances over the years where we have used this process not only to cut out duplication of activities across government but to better reconcile different information collections and on occasion to add—although we are not well known for that—but on occasion to add data items to a particular collection to make it more useful to

the system overall. We also have the authority to designate a central collection agency to obtain information when more than one agency is interested in the information, and to direct one agency that collects the information to make it available to another agency.

Let me shift to the second theme that I was asked to discuss to talk about some of the advisory mechanisms that we have in our system. We do have a variety of councils and committees that assist not only me but also the statistical agencies that carry out our data collection and processing and dissemination activities. I am going to group these loosely into different kinds of advisory mechanisms. First, I will talk briefly about what I will call broad-scope advisory committees, and here probably the best example is something that is outside of government; it is in our National Academy of Sciences, which was established by President Lincoln some years back. Under the auspices of the National Academy of Sciences there was established in response to a request by the 1972 President's Commission on Federal Statistics a Committee on National Statistics. This committee has on it about 15 experts from various disciplines who guide the work of the Committee.

Now what does the Committee actually do? The Committee for the most part advises on specific activities of the federal statistical agencies. It does it by convening panels of volunteers experts—no one is paid for this work—to help us in a variety of statistical programs. For example, current review under the auspices of the Committee on National Statistics include coverage evaluation and experimentation for the 2010 decennial census, functionality and usability of estimates from the American Community Survey, benefits of sharing business data among statistical agencies, and reviews of the Census Bureau's State and Local Governments Statistics Program, the Department of Agriculture's Agriculture Resource Management Survey, and the Bureau of Justice Statistics Portfolio Surveys.

I also want to mention a very valuable publication that the National Academy of Sciences developed for the first time about a dozen years ago on principals and practices for a federal statistical agency. This publication presents some comments on three basis principals for the work of statistical agencies, including relevance to policy issues, credibility among data users and trust among data providers. It then goes on to discuss 11 important practices for a statistical agency. These include among others a strong measure of independence, a commitment to quality to professional practice, openness about sources and limitations of data, an active program on methodological and substantive research and cooperation, and coordination with other statistical agencies—a familiar set of themes that we are discussing here.

We also have a number of expert advisory committees at the individual agency level. One of these advisory committees is called the Federal Economic Statistics Advisory Committee, which was established about a half dozen years ago. What is important here and relevant is that since we are a

decentralized system with various pieces of our economic statistics being produced by three-plus agencies of government, this committee was established to give advice to those agencies so that the people can be thinking about the components of GDP and relevant agencies who are responsible for collecting them. I have many examples of the kinds of things these committees are working on but probably not enough time to discuss them.

I want to note a few more of these agency specific advisory committees, just to give you a sense of how many there are. The Census Bureau has what we call an Advisory Committee of Professional Associations. This includes the American Statistical Association, the Population Association (that is the demographers), the Economic Association, and the Marketing Association; this Committee advises the Census Bureau on a wide array of issues ranging from small areas estimation methods to increasing the quality and utility of data products, improving survey response from business, enumerating problematic small multi-unit dwellings and so on. I am not going to go through every one of these, but the Bureau of Transportation Statistics has a committee that actually helped them to develop a new economic indicator some years back. The National Agricultural Statistics Service has a committee that advises in particular on the conduct of the agriculture census and the related surveys of agriculture. The Bureau of Economic Analysis has an ongoing committee in addition to the one I mentioned before which has adviced on a number of things, including most recently two experimental series that BEA is working on, GDP for metropolitan areas and quarterly GDP by industry, and particularly looking at whether the methodology proposed is sufficient or whether new research is needed, how useful the new data series would be to a variety of users, how detailed and frequent the data should be in order to be useful to decision makers. The National Center for Health Statistics has recently established a Board of Scientific Councillors. Again, as with these other committees, the members are generally drawn from academia. There are few exceptions but in almost every case, we are talking about academic counterparts with whom they work.

The next thing I want to mention in terms of our collaborations is our collaboration with individual academics. Again, a long standing history; there are literally dozens of examples—even in the current day, there are dozens of examples that we can talk about. I have put a few of them up on the screen for you, the areas where work is ongoing and again we can talk about these in more detail. (I do have some text that I can leave behind to the extent that it is of interest.)

In describing our working relationships with academia, I particularly want to talk about what I will call new and innovative collaborations with researchers. We do have a number of kinds of ways in which we are trying to work with the research community, particularly in terms of their data use. I should note that we already have our agencies producing on a routine basis public use micro data files. So those are already out there. What I am talking about now is something that goes beyond the public use files -where we have established a variety—I think there are at least three examples here—of means where an academic researcher can submit a proposal for work with a particular data series, and in several of these situations we have established means where the researcher can in fact have access to identifiable micro data. This is considered a little risky by some of my colleagues. Let me note very quickly that anyone who is involved with a data enclave such as we are talking about here, particularly the research data centers of the Census Bureau, in the first instance has to have a project proposal that demonstrates the usefulness of what is to be done and the parameters of what is going to be done, and the academic becomes a sworn agent of the Census Bureau so that individual is then subject to all of the fines and imprisonment penalties as if he were an actual employee of the Census Bureau before taking on any access to the information. We have several different models for how we are doing this. Maybe that is the beauty of a decentralized system in some way. We have different arrangements by our different agencies that are working on this.

As I end my part of this presentation, I want to mention one thing that does not appear anywhere in writing or on my slides, but occurred to me yesterday when we were talking informally. One additional collaboration that we have established with the academic community over the past 10 to 12 years has been a collaboration to foster better university training of the kinds of people that we need in our federal statistical system; in particular, our felt need a dozen years or more ago was to have more people who had interdisciplinary training. They needed to have not just statistics but they needed cognitive psychology and they needed a bit of economics and so on in order to be most effective as participants in some of our agency work. So the agencies collaborated to establish something we call the Joint Program in Survey Methodology. From the academic side, it is a partnership between the University of Michigan and the University of Maryland as well as a survey organization called Westat. From the government side, those agencies that I mentioned on the Interagency Council on Statistical Policy literally are sharing the funding responsibility for the program. The program initially produced a cadre of Masters degree recipients. It has now added PhDs to the program and several graduates are coming out of that level. And importantly, it has also added a certificate program that we can use more for people who are already in the system to upgrade their skills. Again, something else I would be happy to talk more about. Thank you very much.

Dr. Kuroda: Thank you very much Katherine.

**Mr. Lin Xianyu, Deputy Commissioner, National Bureau of Statistics, China:** Ladies and gentlemen, good afternoon. First of all, I would like to express my thanks to the Statistics Bureau of Japan for inviting me to this symposium. It is a great honor for me to attend this symposium and have

a chance to meet my old friends. We have had good cooperation for 20 years. We have learned a lot from our partner and their experiences.

The paper of my presentation is called National Economic Accounting and Statistical Development of China. This is a big topic but because of the time limitation I would like to focus on GDP accounting and service statistics. As you may know, until the 1980s, China adopted the material production system (MPS) used by the former Soviet Union. After 1995, we adopted gradually toward the system of national account (SNA) proposed by the United Nations. In recent years, we have really good development and a rapid development of the economy. The growth rate of GDP for 20 years has been around 10 percent. The countries all over the world pay attention to China's statistics work. International organizations pay special attention to the quality and accounting level of the GDP.

As you may know, the amount of GDP in China is around one-quarter of the world. For Chinese statisticians, we are focusing on the quality of the GDP to see if it reflects the reality of China. We think that the weak point of the Chinese GDP is the accounting of the service sector. Why? It has a historical reason. First, China is transferring from a planned economy to a market economy. Therefore, the main economic components changed. In the past, the state-owned and public-owned businesses took up a large proportion but nowadays the private and individual businesses are growing rapidly. In the same time, there are many joint ventures. For example, Japanese and Chinese joint ventures. The change of economic component makes the statistical work more difficult.

Second, many new type of services emerged. For example, service of information technology. These new type of services are not included in the statistics because we adopted the MPS for a long period. Third, the service activities happened within the manufacturing and construction businesses are not included separately in the statistical work.

Because of the above-mentioned reasons, the Chinese government decided to conduct the first economic census in 2004. The economic census has the following three main purposes. The first is to meet the needs of the economy and social development. The second is to serve the formulation of China's development strategy and plan. The third is to improve the quality of the national accounts. The economic census in 2004 had a very large content. Excluding agriculture, the census covered all the businesses of the first industry and tertiary industry in China. In China, there were several censuses, the census on the basis unit, an industrial census, a census on manufacturing and construction businesses. The 2004 economic census covered all the censuses mentioned above and made them into a unified census. It was decided by the Chinese government that the economic census is conducted every five years.

Allow me to make a brief introduction on achievements of the 2004 economic census. Through the economic census, first, we have obtained rich and basic information on the secondary and tertiary industries. Second, the Business Register and data systems of the secondary and tertiary industries were established. During the first economic census, not only the National Bureau of Statistics is responsible for this economic census, but also the Department of Taxation, the Department of Industry and Commerce Management and the Department of Civil Affairs were involved in the economic census.

After the census, we established a system of exchange of data and information among these departments. Some provinces and cities in China can get the data from the taxations departments and other administrative departments in due time. At the same time, the economic census also collected the financial data of the businesses. As you know, the compilation of GDP is closely linked with the financial data. If we need real figures of the value added of the tertiary industry we must collect the financial data of the enterprises. Through the economic census we collected detailed financial data of the enterprises engaged in service. We also collected administrative data and collected data on individual businesses, including self-employed enterprises.

With these detailed information, we improved the quality of China's GDP. From the screen you can see that in 2004 there was a comparison between the conventional GDP and the revised GDP. The revised GDP was 2.3 trillion yuan higher than that of the conventional GDP. That means a 16.8 percent upward readjustment. That is to certain extent, because of the value added of the service sector increased. Of the 2.3 trillion yuan, 2.1 trillion yuan is from the value added of the service sector, accounting for 93 percent.

Now, I will talk briefly about the next step in the improvement of the statistical work for the purpose of the improvement of GDP. Just now, I mentioned that the growth of China's economy is very quick. Recently, the Chinese government has paid great attention on the development of service. The Chinese government put forward a new development target. That is, first by the year 2020, the per capita GDP of 2000 will be quadrupled. At the same time, the proportion of the value added of the service sector to GDP should be over 50 percent. The first economic census results showed that the proportion of the service sector to GDP in China is lower. Certainly, it is different for the big cities such as Beijing, where the value added of the service sector is about 70 percent. It is requested by the Chinese government that the official statistical department should set up the service system and information management system in a scientific, standardized and coordinated way.

To meet the needs of these requirements, the official statistical office of China in the coming five years will give priorities in the following five aspects. Firstly, we are now preparing the second economic

census, that is the 2008 economic census. The second economic census is different from the first one in the following two aspects. First is that in the second economic census, we will make full use of the administrative data from the Department of Taxation. As the self-employed businesses change frequently, some self-employed businesses did not register although they have some economic activities. Therefore, we should make full use of the administrative data of the Department of Taxation and at the same time to make a check on self-employed businesses to see if there are some under-reporting. Second, the data of energy consumption will be collected in the second economic census. During the first economic census, the energy consumption is only limited in the industrial activities. During the second economic census, we will collect the data on energy consumption for the whole society. Thirdly, we will set up a system of sample survey on the service sector. For example, the business service, leasing service and computer service and so on. Secondly, we will set up a system of the financial accounting reporting of the administrative departments. After the first economic census, we set up a financial accounting report system of 20 administrative departments. This is a very important work. Except for the financial accounting report of the Ministry of Finance, we also collected the administrative data from other departments, which is very important for the compilation of national accounts. Thirdly, we will make a survey on highway and water transportation. Fourthly, we will make good use of the input-output data. Finally, we will establish a system on the price survey and the price index compilation, which is very important for the calculation of value added of the service sector at constant prices. Other countries in the world also face the questions of the compilation of the value added of the service sector at constant prices. To improve the service statistics, there are many other matters to improve. Because of the time limitation, I will just make such a brief introduction. I had to use three languages for my presentation. Sorry for taking up your time.

**Dr. Kuroda:** Mr. Lin, it was very nice to translate simultaneously between Chinese and English, and again into Japanese. It was a very, very interesting experience for us. He mentioned about the experiences of the improvement of SNA data, especially the experience of the economic census.

As you know, in Japan, we are planning a first economic census two years later in order to consolidate various censuses. Therefore, we can learn many things from the Chinese experience, I think. Also, in the future plan in China, they are thinking about using administrative data. That is also a very interesting program. In the discussion, we would like to come back again to this topic.

I would like to ask the two discussants. The three speakers, they raised some points of the discussion. One is the management of the human resources. Second is budget management as well as some collaboration and coordination among the department of the officials in statistics and academia. Third is the census, especially the improvement of the SNA and to get some information on the subsectors. In the future, instead of the census, sometimes you have to use some sort of administrative data. That also is another big interesting topic I think.

Firstly, I would like to ask Paul for some discussion—is it okay, 10 minutes, 15 minutes?

**Dr. Cheung:** I do not need that long. Thank you Chair. Since I have already spoken this morning, I think I should give more time to the second discussant, Dr. Omori. I would just ask each presenter one single question. My focus will be on the issue of the system. How do you manage the system? I think in the presentations, they are all excellent presentations and we can learn several things about how they deal with the system. In the UK presentation, it was a very nice presentation talking about the practice of the GSS and especially the part about how they promote professional standards and promote the profession, the training and the recruitments and all the issues. My question to the United Kingdom, how do you deal with the people who are employed in the larger organizations versus those people working in the smaller organizations? I remember from my own experiences when I was running statistical service, could be similar to the United Kingdom. Those people working in the smaller statistical offices, they always complain that they do not get a fair chance of promotion because those closer to the core get presented first and those outside in the smaller units get promoted more slowly. So how do you manage this tension? The system is good; GSS is good. But how do you manage this tension that some seem to have a more favorable position than some of the others?

Then a subsidiary question to this is who decides on the promotion? I think that Mike did not mention this part. How do you give the staff members in the GSS a feeling that there is a fair promotion system, there is a fair appraisal system and that the promotional chances are equal across the whole system? I think this is a very important system in the decentralized statistical system.

Again, Katherine mentioned the US system. It is a very big, very huge and very rich system. We are talking about billions of dollars here. My question here is again dealing with the issue, a lot of the mandate of the Chief Statistician and the management of the overall system comes from the 1995 act. At that time, the quality issue was not really empathized yet, I think. So we hear a lot of things about standard but the application of standards is different from quality. Maybe the quality issue is more with respect to each individual agency whereas from the OMB you are looking at the management of the overall system, you are looking at the standard. The question here is how do you enforce quality across the agencies? So should it be a controlling power issue or do you leave it with the individual agencies? I think many of you know about this Boskin Report on the CPI. Now, that I think that you have a Boskin Commission and to study the CPI, I think that is a little bit of a kick in the statistical system of BLS. The question I want to ask Kathy is how do you prevent another episode similar to the Boskin Report? I

realize also that BLS does not really have an own individual agency consultation committee. Maybe that is why now they need to go under the economic statistics panel.

As for China, of course China's economic census is a huge undertaking and they did it for the first time. It is a major piece of work. Again, coming back to the system, the interesting thing about the economic census for China is that the NBS is driving the whole census—controlled by the headquarters and then sending people out to collect data with the help of the provincial and city statistical offices, but it is center controlled. As you know, in China, one of the problems is that many of the economic statistics are reported by the local units, without management by the center so sometimes there are a lot of problems there. So the question here I want to ask China is to what extent do they see in the future that all the data collection will be done by the center, as in the case of the USA. I think the US as mentioned by Kathy, most of the data is managed by most of the 10 big agencies. And they have a collecting mechanism, by-passing the administrative units. If China continues to rely on the local administration reporting, would they not continue to run into quality issues unless they can consistently improve the standard from the local units? So again, this is a system issue. Who is going to do the data collection? Thank you Chair.

Dr. Kuroda: Thank you very much. I would like to ask the next discussant, Mr. Omori, please.

**Dr. Takashi Omori, Member of the Statistics Commission, Japan:** Thank you very much. First of all, let me express my sincere gratitude to the organizers of this symposium for providing me a precious opportunity to learn and to speak. I work for a private financial institution but today I am speaking in my capacity as a member of the newly created statistical commission.

Let me start with presenting my own very briefly summary after listening to the informative three presentations. First, as to changes in the statistical environment and associated changes in the needs for statistics, I think we can summarize them under five headings. The first one is globalization and national economy versus cross-border firm activities. I have some impression that the traditional framework, that is SNA in combination with international IO table or trade matrix may not be sufficient. Then what are desirable and feasible alternatives? One important example is that the main player of globalization, I think, is the Chinese economy. We do not have sufficient data to analyze for example the implication of Chinese growth to Japan. This also indicates increased need for international comparability.

The second heading is rapid structural change and increased time costs. Increased time costs made the accuracy of conventional surveys lower and there is a need for active use of administrative data to

improve/maintain quality. Structural change, such as privatization or the increasing role of NPOs possesses a new challenge for statistics as well.

The third factor is that academia and market have become heavy users of statistics. For example, academia would like to use micro- and panel-data. They have a lot of good ideas for new surveys and tabulations. Market tends to focus on headline numbers, too much focus on headline numbers without going into the components. They often complain if the outcome is different from what they call their "feeling." And the market may not like press conferences if they are given to a limited number of media people. Both often raise very detailed questions. For example, as a market economist, I have a number of questions that I would like to raise on the way that consumer price index is compiled but I hesitate to ring them up and ask detailed questions because I know they are too busy and I do not think I should bother them too often. Maybe I am not a very good market economist.

But these considerations naturally raise the following set of questions. How should statistical authorities take up their requests? How far should the governments accommodate special needs by them? Of course, official statistics are common goods but there may be a difference in terms of magnitude or depth depending on the users. And the quality of statistics can improve a lot if they are made by staff with an experience as a user, either as a market participant or a researcher. And how to foster exchange of personnel with those fields is one important agenda in my view.

The fourth point is the development in ICT. Perhaps I should not add much about this. This is an important factor for structural change as far as the factor that makes conventional industry classification less meaningful. It has a direct implication for the profession of statistics in terms of data collection, processing and dissemination, as well as the economies of scale in the operation of statistical agencies.

Fifth is the increased disparities. This is a newly arising agenda in Japan as well as in many advanced countries.

Let me now turn to this implication. Broadly speaking, I think all these new factors or changes indicate the need for two things. One is more expertise or in alternative words, professional who are capable both in quantity and quality. So there is a need for a career development system. The second requirement is better collaboration or coordination across agencies and across counties and with users of statistics. So we need a good coordination system.

As for the career development system, ONS or GSS in the UK, which Mike presented, is a very important example to learn. Another example is INSEE in France and one important feature of INSEE is that it

combines the statisticians and researchers. To put it another way, the makers and users of the statistics are in the same organization. As for a coordination system, OMB in the US is a very good example. An important sort of advantage that OMB has is that is endowed with power with respect to budget approval, personnel issues as well as information collection. These are the background for effective coordination. But there may be somebody outside of their scope. This leads to my question to Katherine later on. One question is what can we do for administrative data which is typically held by non-statisticians? Those administrative records are important information but do not necessarily fall into the narrow category of statistics, but they can be quite useful inputs to official statistics including the system of national accounts for improvements.

Now let me turn to specific questions. I would like to ask Mike three points. One is what are the main channels to incorporate views of users? Maybe this is the Statistical Board but I would appreciate it if you could give me a little bit more explanation as to how exactly they are done. The second point is what is the proportion of staff who used to be users of statistics? If possible, I would like to ask your view as to what level would you think is an optimal level as a composition of statistical stuff. The third question, if I may, is in my impression UN ONS is very advanced and has done a pioneering work. In social areas, you have a very good database on social capital. In addition, you have been trying to make estimation of real term public services on the outcome basis for GDP for example. Does the general public, my question is, do they seem happy with more resources for better statistics?

Turning to the US, if I may, I would like to raise four questions for Kathy. The first one is what are the examples that OMB directed an agency to make the information it collected available to another agency? Does it include administrative data outside of the statistical profession? The second question is what is the relationship (demarcation and coordination) between the Inter-agency Council and the agency specific administrative committees? I ask this because I think there might often be a conflict of viewpoints. It often happens in Japan that when we ask some of line ministries for improvements or better use of their statistics, they often respond that they are quite happy with the current system because their statistics satisfy their current needs. But our point is that they do not necessarily fulfill the broader need. The third question is, is there any guideline for controlling the quality of statistics? This has some common element with one of the questions that Paul just asked. I know that you have a sort of standard setting but does it include a standard setting in terms of quality control, for example with respect to accuracy such as standard deviation or disclosure rule of estimation methodology or seasonal adjustment? I ask this because I think that these may relate to a possible weakness associated with a decentralized statistical system. The fourth question is how the views of users, such as academia and market, are taken into account? I think this is one of the important agenda for the Japanese Statistical Commission and I would like to learn from your experience. Can we have a look at your materials,

possibly on the website, as to what their requests were and how those requests are incorporated in improvements or in revisions?

Finally, to Mr. Lin, one question is decentralized versus centralized system. What is the direction are you headed for and what do you regard as the main advantages and disadvantages of each system? The second point is perhaps I should have put it in a broader sense—in the face of rapid structural change, we have to hit the best balance between accuracy and continuity of statistics. One example is that yesterday in a working group in newly created statistical commissions, we discussed whether or not one special account of the national government should be converted to the general government sector rather than public corporation, because they have changed their main objectives. So there is a dilemma. Perhaps China is a country of very rapid structural change. We may have something to learn from the Chinese experience. Thirdly, in terms of distribution or disparity issue, which is a new agenda for Japan as well, I would like to know how far you have been expanding in that direction? Thank you very much Mr. Chairman.

**Dr. Kuroda:** Thank you very much Dr. Omori. The first part of the discussion by Dr. Omori was a summary and he asked some questions for each speaker. Then, I would like to ask each speaker to answer the questions, some parts of that, but as the time is very limited, fewer than five or seven minutes. So is that okay?

**Mr. Hughes:** Picking up the first question about promotions and how to deal with them, the system is based around vacancies. Vacancies will occur and the unit I described, the Statisticians in Government Team, will advertise all vacancies that occur across the GSS. So people apply for posts. Sometimes a post will be filled on level transfer and sometimes on promotion, but every time they are run on a panel basis so that they are open and transparent. There is no nomination as in "you are going to that job next on promotion." It is all done in a very open and fair way. That takes me back to your earlier questions about how do you deal with people in smaller offices who feel they may be disadvantaged. We do not, to the best of my knowledge Paul, have much of a problem with that. People in smaller officers will apply for jobs in other departments in just the same way as other staff. I think a lot depends on what kind of opportunities you get from working in smaller offices compared to larger departments. In my personal experience if you are in a smaller office, you tend to get a wider range of experience; if you are in a larger department, you tend to be working in more narrow domains because of the range of different activities going on.

Responding to the questions that Takashi asked about user consultation, in the UK it happens basically at two levels. We have lots of local communications. So, for example, we would have a user group for

our general household survey, we would have a user group for our labor force survey, etc. But we coordinate all of this at a very high level with the National Statistician having regular meetings with something called the Statistics User Forum, which is a body that represents the totality of users. We have been doing that for a couple of years now. This forum tends to address issues at a high level, strategic issues so to speak. Where that will fit in the new structure is quite an interesting question because the new chairman, Sir Michael Scholar, has already seen the Statistics User Forum and, as you might expect, they are making a case that that they should be dealing with him and his board as well as having regular meetings with the National Statistician. My view is that the Statistics User Forum should continue to meet regularly with the National Statistician as the principal channel of communication but that the Board should also meet with users periodically.

As regards your question about the proportion of staff who used to be users, I have interpreted this to mean the incidence of statistical staff moving from the production of statistics to the analysis of statistics. It is very hard to say but, on balance, I would say it is about 60-40 in ONS; 60 percent of our professional staff are producing statistics and 40 percent are doing analysis on them. I am not saying that is optimal by any means; all I am saying is that is how I think it falls at the moment

As for your final question about UK statistics expanding into the social areas rather than moving away from economic statistics and does the public seem happy with this, well generally yes but I go back to the point that Brian Pink made this morning that you can only achieve these new initiatives at the expense of dropping some of your existing work. There will always be users who are unhappy so I think yes. One of the major areas we have moved to in the last couple of years is the measurement of productivity in the public sector, which is a huge new body of work. That has not actually pleased the departments responsible for those public serves very much and it has been done against a degree of concern but certainly in terms of political commentators, analysts outside and so on, it has been very much welcomed as a brave and very useful step forward.

Dr. Kuroda: Okay, thank you very much. Next I would like to ask Katherine, please.

**Ms. Wallman:** I am going to start by taking the pressure off my colleague to my left, Mr. Omori's question to Mr. Lin reminded me of two things. One is that this distinction between centralized and decentralized has taken on a meeting that is not in my view correct. We have a *continuum* of centralization to decentralization in our countries, but not an either-or situation and I think it is misinforming to act as if it is otherwise. In any event, to the questions you asked me with respect to decentralized systems, I think there are definitely advantages, some of which we have talked about here—the closeness to the policy arena, for example. Perhaps there is more control over resources in

some centralized system, but as we are learning that is not necessarily the case.

I will put the questions together and respond in a cursory way. Yes, there are examples of where we have directed an agency to make particular administrative data, but also survey data, collected by one agency available to another. As an administrative example I will use the customs data that have become part and parcel of some of our trade statistics that are issued by the Census Bureau. But the collector of the data is the customs official and that is administrative data; there is collaboration with the Census Bureau to make the data as useful as possible for statistical purposes. In the area of employer benefits to employees, we had a situation where three different agencies were collecting information from employers about employee-related health benefits. This seemed unreasonable or at least needed to be justified as to why we had to have three separate collections. We had a summit meeting in my office and we decided that we really needed only one collection but there would have to be some better collaboration between and among those agencies in order to have the right information available when one was the main source of collection and the others would be the users.

The Interagency Council on Statistical Policy, as I indicated in my remarks, comprising the heads of the main statistics producing agencies in the government, is really there to help me to think about priorities and issues in the system. The members are heads of agencies within the government statistical system. The advisory committees to the specific agencies are made up of outside people so in the first instance, they would be feeding subject matter and/or methodological expertise to the director of that particular agency, and that might show up in something at my level or something coming up for consideration by the Interagency Council on Statistical Policy, particularly if it is something like GDP where several different agencies, statistical and other agencies, are feeder agencies of the source data for GDP. So I would say that the outsiders are advising the individual agencies and then the agency heads are coming together to talk about the system. That is probably more sensible.

Now it is the fact that I or members of my staff often attend these outside advisory committee meetings so we have first-hand knowledge of what the users are requesting; thus, when we are thinking about what to approve in a budget process or information collection, we have heard it not just through the agencies' lenses but also directly from the users. So we do interact with the outsiders in that way. There are many more specific examples than what I was able to describe in these few minutes.

Are there any guidelines for controlling the quality of the statistics? Yes, although not as many as you would hope or might envision here. A lot of these guidelines, I will call them, are on the collection side. We do also have more generally now, although statistical agencies were ahead of the game on this, we do have information quality guidelines for every agency of government. There was a law passed a few

years ago that essentially gave the public the right to question the quality of information that was being used in important decisions, whether policy decisions, regularly decisions and so on. Basically the

Information Quality Act allows someone who believes the data are wrong to request a correction; the burden is on the request to demonstrate why the quality is poor or why they think there is something wrong with it. There is actually a two-step process, because if the first answer is not satisfactory in the eyes of the requester, there is also an appeal process. As I said, for the statistical agencies, this was really not new requirement because most of them had guidelines such as this in place, but this law is across government for administrative and all kinds of data at this point.

Finally in terms of controlling the quality, again I am going to focus on the input or on the collection side and that is through this process of reviewing every information collection that is being promulgating by the government. We have a lot of opportunity to review for survey methodology, for sample sizes, for appropriateness of the methodology for the intended uses, for adherence to classification, and so on.

Do we spend as much time on the other side, looking at the product that is coming out of the agency? Probably not as much as people would wish, although in a recurring survey, we are doing that every three years as part of the next request for the approval for the collection, we are looking at the output.

So that gets me to Paul's question. Yes, I have given you some demonstration of how we can enforce quality across agencies. Am I able to prevent another Boskin? I do not know.

**Mr. Lin:** Let me answer the questions in Chinese. As I have only five minutes, I will answer two questions, the question from Mr. Paul Cheung on the collection and amendment of data in China. In China we will adopt three methods. First, during the year of the economic census, we will collect the data at the same time at the national, provincial and the county level. Second, for the large and medium sized enterprises, we will collect data through the Internet. We can collect data directly from these enterprises. They will send their questionnaire directly to the National Bureau of Statistics so at the same time. The county statistical office and the provincial statistical office can have a look at the questionnaire. But the county and the provincial statistical offices can just have a look; they cannot make any adjustments and revisions to these questionnaires. They cannot do the tabulation and data processing. Third, for the small enterprises and individual enterprises, we will conduct a sample survey. This is done by the National Bureau of Statistics. The enumerators are from the sub-offices of the National Bureau of Statistics in the provinces. So, the economic census, questionnaire collection and sample surveys are the three main components of the data collection. It means that the central statistical office can control the data and the data are available to the provincial and county statistical offices.

I would like to answer Dr. Omori's question on the statistical system. Just now, Katherine talked about that. In China, we adopted a mixed style of statistical system. I agree with Katherine that there is no pure centralized or pure decentralized system. In China, 70 percent of the data are collected by the statistical office. 30 percent of the data are collected by the different administrative departments. For a statistical system, I think there are two standards to see if it is good or not. It is my own opinion. The first is that if the statistical office has a strong professional ability of coordination. The second is, for the administrative departments, if it is possible to share the results of their data collection. If these two standards are achieved, that means this statistical system is a good one. We are chasing for such a statistical system. Thank you for your attention.

**Dr. Kuroda:** We are almost finished the scheduled time but I would like to open to one or two questions from the floor. Are there questions or comments from the floor? If so, please raise your hands. No questions? This second session is a very interesting discussion from all of the panelists. I would like to express again my sincere appreciation to all of the participants, speakers and panelists. Thank you very much. To all panelists, thank you indeed.