

the Survey Statistician

The Newsletter of the International Association of Survey Statisticians

No. 51

January 2005



International Statistical Institute



Institut International de Statistique

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Letter from the President

As described in the past issue of the *Survey Statistician*, some important activities have improved during the first half of 2004. As a brief summary, I would like to mention the revitalization of the Local representatives network under the coordination of Hiek Som (hiek.som@fao.org) whom you are invited to contact for any suggestions for improvements. I am grateful to Anders Christianson for his commitment and the efforts spent on the positive impulse given to the very important topic of our "Ask the experts" session. Finally, my thanks go to our webmaster Eric Rancourt

(Eric.Rancourt@statcan.ca) for having reorganised our web site and for keeping it up-to-date.

In this message, I would like to inform you about recent updates of current activities as well as new projects which have been launched.

2005 Election Nominations Committee

The 2005 Election Nominations Committee chaired by Claudio Quintano

(claudio.quintano@uniparthenope.it) has completed its work and has finalized a very promising list of candidates for the forthcoming elections. My special thanks to Claudio and to all the members of the Nomination Committee for their commitment. My thanks also go to all the persons who have agreed to run for election for the posts of IASS President, vice-Presidents, Scientific Secretary and Council members.

2005 Cochran-Hansen Prize Committee

I have appointed the 2005 Cochran-Hansen Prize Committee which is chaired by Kari Djerf and composed of the following members from the IASS Council: Gordon Brackstone, Beverley

Carlson, Marina Signore and myself. I remind all interested people that the deadline for presenting a paper was 31 December 2004. As for the past editions, the Cochran-Hansen Prize will be awarded for the best paper on survey research methods submitted by a young statistician from a Developing or Transition Country. Additional information can be found on our web site (<http://www.cbs.nl/isi/iass/>).

IASS Proceedings for the Sydney ISI Session

Following a proposal of Pedro Luis do Nascimento Silva, chairman of the IASS Programme Committee for the ISI Session, Sydney 2005, the IASS Council has expressed a unanimous consensus for the publication of the invited papers presented in IASS sponsored sessions during the 2005 ISI Session. Indeed IASS used to produce a volume of the invited papers until the Berlin ISI session. It would be our intention to produce CD-ROMs containing enlarged versions of the invited papers presented in IASS sponsored sessions to be distributed to the IASS members. My feeling is that Istat (Italian National Statistical Institute) could take care of this initiative.

IASS short courses at the Sydney ISI Session

I would like to remind you about the IASS short courses organised for the Sydney ISI Session by our Scientific Secretary, Marina Signore. The program is really interesting and the courses are a great opportunity also to exchange experiences and get in touch with colleagues all over the world. As you might know the deadline for the registration was 31 December 2004. However, some late registrations are accepted as well. Therefore, I would like to invite all interested people to register for the IASS short courses as soon as possible. You can find additional information in the report from the Scientific Secretary. I would like to specially thank Marina for her

commitment in organising and promoting the courses.

2007 IASS Programme Committee

I have appointed David Steel chair of the IASS Programme Committee for the ISI Session in Lisbon, 2007, and I take this opportunity to wish him a fruitful work.

Initiative for a European Regional Section of IASS

The initiative for creating a European Regional Section of the International Association of Survey Statisticians is progressing. The purpose is to enhance the collaboration of European survey statisticians through a better networking of survey statisticians and through the organisation of a series of conferences on survey methodology.

A group of volunteers is analysing several aspects related to the creation of a European Regional Section of IASS. The volunteers are Pascal Ardilly, Jelke Bethlehem, Siegfried Gabler, Beat Hulliger, Thomas Körner, Seppo Laaksonen, Ralf Münnich, Frank Nolan, Susanne Rässler, Marina Signore and Chris Skinner. The working group will inform about its activities on the web-site www.surveystatistics.net. Interested persons may contact Beat Hulliger (beat.hulliger@bfs.admin.ch) or Ralf Münnich (ralf.muennich@uni-tuebingen.de).

IASS Scientific Meetings and Conferences

The IAOS/IASS Joint Conference on "Poverty, Social Exclusion and Development: a Statistical Perspective" was held in Amman, Jordan, from 29 November to 1 December 2004.

The IASS Programme Committee for the 55th ISI Session, Sydney 2005, chaired by Pedro Do Nascimento Silva (pedrosilva@ibge.gov.br), has been finalised. The program and the invited papers abstracts can be found in the ISI Session website (<http://www.tourhosts.com.au/isi2005>) or in Bulletin n.2 (<http://www.tourhosts.com.au/isi2005/qinfo.asp>).

I am glad to announce that the IASS is sponsoring two very important methodological Conferences, in addition to the Conferences

already mentioned in the past issue of the *Survey Statistician*.

- First, the IASS is co-financing the International Conference on Telephone Survey Methodology to be held in January 2006, in Florida. The financial support is 3000 U.S. dollars.
- Second, the IASS is financially supporting for 5000 U.S. dollars the Third International Conference on Establishment Surveys (ICES III), to be held in June 2007.

Luigi Biggeri, President

Report from the IASS Scientific Secretary Marina Signore

IASS Short Courses at the 55th ISI Session, Sydney 2005

As you know, an IASS specific activity which has usually received a large consensus consists in organising short courses on survey methodology in connection with the ISI Session.

This is probably the last advertising of the IASS Short Courses offered at the 55th ISI Session, Sydney, April 2005. Therefore, I would like to take this opportunity to invite all interested people to send their registration form to the address provided below as soon as possible in order to be included in the courses. It is worth reminding that the deadline for registration has already expired but that late registration is allowed.

During these last months, a lot of efforts have been made in order to disseminate the information on the short courses to the widest audience possible. Earlier announcements have been published in the past issue of the *Survey Statistician*, in the ISI newsletter, and in the Bulletin n°1 of the ISI 2005. Updated information has been made available in the ISI Bulletin n.2 and on the IASS Web site.

Brochures prepared by Istat (Italy) with the Short Courses Program have been distributed to all the participants in several International Conferences, namely the European

Conference on Quality and Methodology in Official Statistics, Q2004, Mainz, 24-26 May 2004, Compstat 2004, 16 Symposium of IASC, Prague, 23-27 August 2004, and 2004 Statistics Canada Symposium, November 2004. I would like to thank John Kovar who has arranged to have copies of the brochures distributed at this last Conference.

I would like to express my gratitude to Lars Lyberg, Gordon Brackstone, Jan Kordos, Stan Azen and in general to the Editors of the following scientific journals, JOS (Journal of Official Statistics), Survey Methodology, Statistics in Transition, and CSDA Journal for having published announcements of the Short Courses.

Special thanks are also due to the local organisers of the 55th ISI Session in Sydney, and in particular to Anna Poskitt for their very efficient support for the necessary local arrangements.

The IASS is grateful to the U.N. Statistical Division for providing financial support to attend the Short Courses to people coming from developing and transition countries. The IASS will also provide some financial support to participants from transition and developing countries, consisting in a free registration. For further information, please contact Marina Signore, the IASS Scientific Secretary, at the address provided below.

Program

The International Association of Survey Statisticians has developed a program of short courses to be offered just prior to or after the 55th Session of the International Statistical Institute (ISI), which will be held in Sydney, Australia, April 5-12, 2005. The courses are led by international high-level experts and are addressed to practitioners, researchers and students in statistics and survey methodology

The official language of the courses is English. The courses will be held at the Australian Bureau of Statistics in Sydney.

Venue: Australian Bureau of Statistics
St. Andrew's House
Sydney Square
Sydney NSW 2000

Course A: Workshop on Survey Sampling

Presented by:

Graham Kalton (Westat)

Steven Heeringa (Survey Research Center, University of Michigan).

The workshop will focus on practical aspects of sampling for household surveys. It will start from basic principles and build up to complex stratified multi-stage sample designs. It will cover the main sampling techniques and also such issues as sampling frames, weighting, and imputation. It will end with an introduction to variance estimation with complex sample designs.

Duration: 2.5 days

Dates: 1 and 2 April 2005 (full days); 3 April 2005 (morning)

Course B: Variance Estimation in Complex Surveys

Presented by:

Wayne Fuller (Iowa State University)

Kirk Wolter (University of Chicago)

F. Jay Breidt (Colorado State University)

Anthony An (SAS Institute)

The purpose of this course is to provide training in variance estimation in complex surveys for survey statisticians, especially those from developing countries. The course will cover methods of estimating variances for statistics such as means, proportions, ratios, regression coefficients, and statistics arising in the analysis of two-way contingency tables. Both linearization and replication methods will be discussed. The use of computer software for computing variances of statistics from complex sample designs will be demonstrated and instruction will be given in practical applications. About one-half of the course will be devoted to implementation on the computer.

Duration: 2 days

Dates: 3 April 2005 (afternoon); 4 April 2005 (full day); 5 April 2005 (morning)

Course C: Workshop on Editing and Imputation of Survey Data

Presented by:

John G. Kovar (Statistics Canada)

Eric Rancourt (Statistics Canada)

Surveys and censuses conducted by national statistical agencies, research institutes and other survey organizations suffer from various degrees of nonresponse even under ideal conditions. In order to try to alleviate the

problems caused by nonresponse, editing and imputation methods are usually applied. Since the process of editing and imputation is time and resource intensive, care must be exercised in controlling the efficiency as well as the effectiveness of the methods. The aim of this short course is to introduce the students to methods of prevention, detection and treatment of nonresponse. Evaluation of such methods and their impact on the survey outputs will be highlighted. Existing edit and imputation software will be compared. Numerous examples will be provided to illustrate the material presented.

Duration: 1.5 days

Dates: 4 April 2005 (full day), 5 April 2005 (morning)

Course D: Introduction to Survey Quality

Presented by:

Paul Biemer (RTI International and University of North Carolina)

Lars Lyberg (Statistics Sweden)

The course is designed for a broad audience that includes experienced survey researchers who would benefit from a better understanding of the survey data quality as well as others with little or no prior experience in survey methods. It will provide a brief introduction to survey quality using total survey error paradigm. The course begins with a discussion of total survey error and its relationship to survey costs. Then the major sources of survey error are discussed, focusing on four major sources: coverage error, nonresponse, data processing error and measurement error. We also discuss some methods that are most often used in practice for evaluating the effects of the source on total survey error.

Duration: 2 days

Dates: 3 April 2005 (afternoon),
4 April 2005 (full day), 5 April 2005 (morning)

Course E: Statistical Disclosure Control

Presented by:

Anco Hundepool (Statistics Netherlands)

Eric Schulte Nordholt (Statistics Netherlands)

Peter-Paul de Wolf (Statistics Netherlands)

The purpose of this course is to provide the participants with an understanding of the methodological aspects of Statistical Dis-

closure Control, to train them in solving problems on this topic and to demonstrate the ARGUS software. The meaning and impact of Statistical Disclosure Control can only be appreciated in the light of practical problems and policy related issues. Therefore, some attention is also paid to such topics without putting heavy emphasis on them. Topics covered include theory and methods on microdata, exercises on microdata, demonstration of Mu-ARGUS, theory and methods on tabular data, exercises on tabular data, demonstration of Tau-ARGUS, legal issues, on-site facilities and remote access.

Duration: 2 days

Dates: 13 April 2005 (full day), 14 April 2005 (full day)

Course F: Design and Analysis of Repeated Surveys

Presented by:

David Steel (University of Wollongong)

Craig McLaren (Australian Bureau of Statistics)

This course will consider the interaction between the design of a repeated survey and the methods used for estimation and analysis. The choice of rotation pattern will be considered in terms of the impact on the estimation of levels and changes. Composite and other forms of estimators will be reviewed and the interaction between design and estimation explored. Estimation of seasonally adjusted and trend estimates from repeated surveys will also be considered.

Duration: 2 days

Dates: 13 April 2005 (full day), 14 April 2005 (full day)

Registration

Course participants are required to be members of the IASS in good standing. For non-IASS members, membership to the IASS is offered together with the participation in a course.

Deadline

The deadline for registration is **31 December 2004**. For late registration a penalty of 50 € will be added.

Course Fees

	1 course	2 courses	3 courses
IASS members from Developed Countries or sponsored by a Developed Country	240 €	360 €	420 €
Non-IASS members from Developed Countries or sponsored by a Developed Country	260 €	380 €	440 €
IASS members from Developing or Transition Countries	120 €	180 €	210 €
Non-IASS members from Developing or Transition Countries	130 €	190 €	220 €

Group discounts for several participants from the same Institute are available: 10% discount for 5 people and 20% for 10 people.

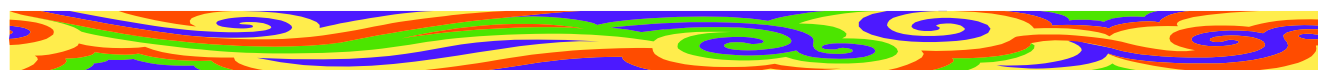
The registration form is posted on the IASS web site <http://www.cbs.nl/isi/iass/> and on the Conference web site <http://www.tourhosts.com.au/isi2005/>.

For further information please contact Marina Signore, IASS Scientific Secretary at the following address: ISI2005_IASS_shortcourses@istat.it.

CHANGE OF ADDRESS

Members are encouraged to inform the IASS Secretariat of changes of address as soon as possible. Mailings of the proceedings of the IASS papers presented at the ISI sessions, and "The Survey Statistician" will be delayed and may be lost if the Secretariat does not have your correct address.

You may notify Ms. Claude Olivier of your change of address by completing and mailing the Change of Address form given at the end of this newsletter. Alternatively, you can provide the same information to Ms. Olivier by email to claudes.olivier@insee.fr.



Country Reports

Canada

John Kovar

The Canadian Labour Force Survey (LFS) is redesigned every ten years, and the methodological development phase of the latest redesign has been completed. This phase involves clustering, stratification, sample allocation and sample selection. The new design includes a number of innovations such as the use of Statistics Canada's Address Register (AR), the creation of more special strata (namely strata with high concentrations of certain groups such as aboriginals and recent immigrants), and a more efficient approach to high-cost areas. For the latter, (i) special strata consisting of clusters with high vacancy rates were created, (ii) some hard-to-reach clusters and some with a very high vacancy rate were removed from the frame, and (iii) the sampling rate was reduced in the high-cost areas that were kept in the frame.

The LFS redesign is now in its implementation phase. In this phase, cluster maps are prepared and shipped to Statistics Canada's Regional Offices, and field staff create or update dwelling lists for those clusters. Additional new clusters for the Survey of Household Spending are being handled at the same time, and extra clusters for the Canadian Community Health Survey will be dealt with as well. The next step for the LFS will be to start phasing in the new sample, one-sixth (i.e., one rotation group) at a time, beginning in November 2004 and ending in April 2005.

Unlike previous redesigns, this one was self-funded using a temporary three percent reduction in sample size and, as a result, only essential changes were introduced. The

reduction in sample size will have insignificant impact on LFS data quality at the national and provincial levels. This is primarily because of the expected gain in efficiency due to the up-to-dateness of the new design. For other surveys that use the LFS frame, the creation of the special strata mentioned above will benefit surveys focused on those special populations. For more information, please contact Jack Gambino, (613) 951-0334, or at Gambino@statcan.ca.

In preparation for the 2006 Census of Population, the **2004 Census Test** has recently been successfully completed. With the 2006 Census, Statistics Canada will be implementing a number of major changes to its census methodology and the 2004 Census Test, covering about 300,000 dwellings, was conceived as a dress rehearsal of the procedures and methods to be used in 2006. Some of the major changes are the following: mail-out of census questionnaires to most dwellings based upon a register of addresses as the frame; mail-back of completed questionnaires to a central location (rather than local enumerators as in the past); availability of response via Internet; and automated data capture using optical mark recognition and intelligent character recognition. Evaluations of Census Test results indicate that, although there are some adjustments required and some challenges in scaling up for the full census, the planned strategy will work well. Two of the changes will now be highlighted.

In 2006, Census questionnaires will be mailed out to about two thirds of residential addresses in Canada. For the remaining areas, questionnaire delivery will be via conventional list-leave methodology. For the mail-out areas, a list of addresses will be first extracted from the Address Register about

nine months prior to Census Day – May 16, 2006. This list is then field validated for additions, deletions and other corrections. The resulting list is then used as the address frame for the census and for pre-printing of addresses on the census questionnaires. To control questionnaire delivery, follow-up and the various steps in processing, each questionnaire is also pre-printed with a unique identifier linking it to the frame and a Master Control System which will track questionnaires for each address throughout the census process. Evaluations have shown that this process of field validation to update the register works well to produce a list that minimizes both undercoverage and over-coverage of dwellings.

The Canadian Census piloted response via Internet on a limited basis in the 2001 Census. In the 2006 Census, internet response will be made available for all respondents. This was also the case in the 2004 Census Test. Reception of the Internet option in the test was quite positive with an uptake rate which, despite being lower than that planned for 2006, was still very good in the context of a Test Census with voluntary response and minimal public communications program. Resulting data quality was excellent, providing improvements in a number of dimensions relative to that from the paper questionnaires. To achieve this, several difficult technical challenges had to be overcome to produce an application that ensured the confidentiality and privacy of responses and which was quick and easy for users.

For more information on the 2006 Census of Population and the 2004 Census Test, please contact David Dolson (ddolson@statcan.ca or at 613-951-4783).

France
from Benoît Riandey

In January 2004, INSEE, France's statistics institute, successfully conducted the first annual collection of the "**Recensement rénové de population**" [redesigned census of population]. Given the unique nature of the operation, it is important to review the

principles¹ of this census and for the first report to be presented to IASS members. The goal is to provide the geo-demographic data that censuses provide every 5 to 10 years on an annual basis, without increasing collection costs. With no population register, this could only be achieved through a survey. More specifically, INSEE divided France's territory into two strata groups: communities of fewer than 10,000 inhabitants are divided into five samples, each representing 1/5 of the population and are surveyed exhaustively every five years. It is a rotating survey. In communities of over 10,000 inhabitants, 8% of inhabitants are surveyed every year, in the spirit of a large micro-census. Publications will rely either on a single annual collection wave or an average of five successive waves. The first type of estimation will be appropriate for national and regional results; the second, for more local results. Nevertheless, by benchmarking the census estimations each year to the dwelling tax rolls, INSEE will be able to produce an official annual estimate of the population in all communities, even those surveyed only every 5 years.

The report on the first wave was eagerly awaited. The fear was that, without the traditional publicity campaign, the non-response rate would be high. In reality, non-response was 2.8% in small communities, the same rate as for the former census, while in large communities, it was slightly less than 5%, which kindles considerable hope once the introductory period is complete. This result is due to the wisdom of INSEE, which decided to stray from the mathematical optimum in order to improve collection: the initial idea was to reduce the cluster effect by only surveying one in five households in collective dwellings. However, that approach might leave a household wondering why it was being surveyed and not its neighbour? This decision illustrated the fact that surveys are not merely a matter of mathematics. To give the complete picture of how this project was received, it is important to mention the attitudes of communities and

¹ "Redesign of the French Census of Population", Jean-Michel Durr and Jean Dumais. *Survey Methodology*, vol. 28, n° 1, June 2002, p. 47-53. Jean-michel.durr@insee.fr, jean.dumais@statcan.ca

urban planners. Communities were quite insistent about more frequent enumeration than was the case with the old censuses. In contrast, the disappearance of the exhaustive neighbourhood enumeration was strongly resented by many town planners at a time when they expected better statistics as a result of gains in productivity: the optical capture of questionnaires and automatic coding might have provided an exhaustive social description of neighbourhoods, notably for the professions. However, optimization at constant cost also means specialization.

The survey profession is especially pleased with the new tool because it offers remarkable possibilities for sampling. Although the method of rotating communities raises some difficulties with respect to building a master sample, it does offer three innovative possibilities. The first concerns dwelling samples: in large communities, collection for the redesigned census relies on a new inventory of buildings, listing dwellings by address. This anonymous inventory creates a sampling frame that is constantly updated by the communities. Making the inventory available to private institutions would enable them to significantly improve their in-person probabilistic surveys, which suffer from a serious shortage of sampling frames. Telephone directories, which were relatively exhaustive in the 1990s, have become increasingly inadequate due to contamination arising from marketing and to the atmosphere of secrecy created by competition between telephone operators. Let us hope that no monopolistic spirit dashes this expectation.

The redesigned census gives INSEE a tool it can use in place of demographic sampling. As in any country without a population register, samples of individuals cannot be directly created until the day after the census. Without a priority record for forming the survey frame, samples of individuals are not available until two years after the census, when there have already been a great many residential changes.

In practice, surveying the household cluster or conducting a Kish sample prevents an efficient survey of a specific sub-population, such as a birth cohort. As a result of the redesigned census and technical progress,

the rapid availability each year of census bulletins from the sampling frame represents a real revolution in French survey practice. Household surveys, developed to meet national accounting requirements, are complemented by a flexible and rigorous tool of samples of individuals essential to social statistics.

The redesigned survey will allow finely targeted two-stage surveys to be conducted annually. Since the cost of the first stage is the main obstacle to this type of sampling, their designers are still seeking a large first-stage survey that is already financed. The annual redesigned survey is the perfect, although not original, prototype. The last traditional French census in 1999 already provided two examples of such surveys. A longstanding, retrospective demographic bulletin (4 pages), linked to the census of 1 in 100 districts (about 300,000 surveys) and entitled the "Famille" survey, provided INED with original surveys: for some time now, a survey of divorcees who had remarried, and recently, the "Biographie et entourage" survey. Lastly, the *Daily Living and Health* bulletin develops the Canadian approach: posed to 200,000 people during the 1999 census, this questionnaire provided the means for identifying a sample of 20,000 persons with disabilities. In future, these types of initiatives can be done annually. This is a second revolution for French surveys. For further information, please contact Benoît Riandey (riandey@ined.fr).

In conclusion, we foresee much interest in the discussions to take place at the 4th **Colloque francophone sur les Sondages** [Fourth Francophone Conference on Sampling] from May 24 to 27, 2005 in Quebec City, Canada (<http://www.crm.umontreal.ca/sondages2005/>). We hope to see many of you there, sharing in the debate.

Italy

Claudio Quintano

The European Council Regulation on Short Term Statistics (N. 1165/98 of 19th May 1998-Annex D) requires the Member States to produce turnover indicators for many market

services activities, including wholesale trade (NACE 51). **The new quarterly survey on wholesale trade in Italy** was launched at the beginning of 2002, aiming at producing quarterly turnover indexes for seven wholesale trade sub-sectors.

The survey has been designed using stratified simple random sampling; the overall sample size has been determined at about 7500 survey units, stratified by employment size, economic activity and geographic localisation. The data collection has been organised using self-completed questionnaires sent by mail. The arrival (by mail or fax) of responses is continuously monitored and reminders are sent to non-respondents by mail; telephone contacts are used in a second stage. In the first three rounds of data collection (concerning the retrospective information, the first and the second quarter of 2002) the response rate has been, on average, close to 60%, with turnover coverage of up to 70%.

Data editing has been developed using a two level control procedure for outlier detection: at micro level it corrects non-representative outliers (due to measurement errors, as well as recorded errors and other type of compilation errors); at macro level it detects influential outliers through macro-editing techniques. A comprehensive experiment has been performed with different methods of outlier treatment. The results have been evaluated taking as benchmark both national indicators with high correlation with wholesale trade, and European indicators of the same economic activities. Those comparisons have confirmed that the new survey is yielding meaningful results.

Turnover quarterly indexes (with base 2000=100), referring to the period spanning from the first quarter of 2000 to the first quarter of 2003, have been published for each of the seven sub-sectors requested from the Regulation in June 2003. In September 2003, indexes referring to the second quarter have been published within 90 days from the reference period, achieving the timeliness requested by the Regulation.

For further information on the survey methodology or data products, please contact Raffaella Succi, Istat, Short-term statistics on

Industry and Services Unit (e-mail: succi@istat.it).

New Zealand
Helen Stott

In order to strengthen New Zealand's national statistical office, Statistics New Zealand is leading a new phase in the evolution of the national official statistics system that will see greater cooperation and collaboration across all government agencies. Core elements of the Statistics New Zealand Business model are also being re-engineered to make greater use of new technologies and to standardise processes across all New Zealand's key statistics, while access to microdatasets and all statistical outputs is being improved.

With respect to the **Official Statistics System**, this exciting phase sees Statistics New Zealand assuming greater leadership, responding to societal trends and changing expectations of clients in the collection of data and provision of access to information. This is being achieved though an increase of \$(NZ)110 million in funding over five years from the 2003 and 2004 Government Budgets. This 2004 funding included \$14 million of funding which will enable:

- definition of a portfolio of statistics that are key performance measures of New Zealand as Tier 1 statistics;
- establishment of an advisory committee independent of Statistics New Zealand, to advise on the quality and relevance of the system of official statistics;
- establishment of an Official Statistics Research and Data Archive Centre that will ensure the retention of official data as an enduring national resource and facilitate greater access to researchers to micro data;
- improved knowledge of, and access to, statistics across the whole-of-government; and
- introduction of a range of other initiatives to monitor and manage survey-taking across government and the associated burden placed on respondents.

An initial investment of \$22.5 million over four years, starting in 2005/06, is being made available to coordinate and develop a whole-of-government programme of **official social statistics** and associated research and evaluation activity. This programme of work will aim to integrate existing social surveys with a range of new or repeating social surveys. New areas of development for New Zealand include a biennial General Social Survey, a decennial Family Survey and allowance for future surveys on new and emerging topics.

One key part of the programme is the new longitudinal Survey of Family, Income and Employment (SoFIE) which is being funded over a 10 year period. In its first wave, approximately 11,500 households were interviewed over the year to September 2003, with data collected from 22,000 individuals aged 15 years and over. All individuals in these households were asked to become original sample members. They will be reinterviewed in subsequent years, regardless of changes in their place of residence. SoFIE was conducted using computer-assisted interviewing (CAI). The preliminary results of the first wave of this survey were released on 30 June 2004.

A further \$37 million will be used to improve Census collection for the March **2006 Census of Population** and Dwellings, including an Internet option for New Zealanders in filling in the Census. The test for the internet option will be held in March 2005.

There is also an allocation to develop new measures of business performance, by linking Statistics New Zealand's business information with employer and employee administrative data. This adds to the information being provided by a series of new surveys related to business performance already underway or in development. One example is the recently released Innovation Survey 2003, which was the first survey of its type to be conducted in New Zealand. The Innovation Survey was designed to develop an understanding of the contribution of technological innovation to the New Zealand economy, by producing statistics on the level

and characteristics of innovative activity in New Zealand businesses.

Another set of funding will allow us to measure the impact of **voluntary and unpaid work** on households, allowing use of this data in preparation of a satellite account for the Household and Non-Profit sector.

These new areas of work are being supported by a **business transformation strategy**. Its aim is to improve, streamline and standardise business processes in order to optimise the Statistics NZ business model from end to end perspective. There are three main components to this:

- A number of standard, generic end-to end processes for collection, analysis and dissemination of statistical data and information, which will be applied consistently and with appropriate statistical methods across each subject area at Statistics NZ, whether the data is collected via a survey instrument or from an administrative data source.
- A disciplined approach to data management, using a standard information life cycle for all statistical data and information across the organisation.
- An agreed technical architecture for systems designs, to ensure that systems solutions created to meet the needs of a particular business group are developed within the standards and disciplines imposed by the information strategy.

Some of the benefits the strategy will provide are:

- The flexibility to respond to changes in users needs and demands, to make use of new data sources or methods and to provide a flexible range of information access methods;
- A reduction in the time to design, build and process information sources, providing more time for the analytical and dissemination processes;
- The ability to more easily match and confront data in order to increase the quality of Statistics NZ information;

- A reduction in the number of individual collections or the need for new collections to create new statistics.

These new developments will provide the opportunity to build our survey and statistical methodology capacity, and to use new methodology developments in, among other areas, integrating administrative data and survey data, measuring small and hard to measure populations, analysing complex and longitudinal data and protecting the confidentiality of microdata while retaining its usefulness. They will also put pressure on both our business and household survey frames, and may require new approaches to sample selection. For more information, please contact Helen.Stott, Helen.Stott@stats.govt.nz.

Philippines

Gervacio G. Selda, Jr.

The Bangko Sentral ng Pilipinas (BSP) recently launched a new survey entitled **Consumer Expectations Survey (CES)**. The survey is designed to collect information on the expectations and sentiments of the households sector on the economic conditions in the country. The initial round of the CES was conducted in July 2004 in collaboration with the National Statistics Office which carried out the data collection and processing of the questionnaires.

The CES is a quarterly survey which complements the existing Business Expectations Survey of the BSP. The survey is implemented in the National Capital Region of Metro Manila but future plans include extending the coverage to some areas outside Metro Manila. About 2,700 households are covered in the survey which adopts the sampling design of the Labor Force Survey based on the 2003 master sample. The next round of the CES is in October 2004.

The seven-page CES questionnaire is made up of four major parts:

- (a) demographic and economic characteristics
- (b) economic and financial outlook,
- (c) economic indicators, and
- (d) buying conditions.

The outputs to be generated include:

- (a) index of consumer sentiment by component for current and next years,
- (b) index of current economic condition by component,
- (c) index of consumer expectations by component,
- (d) expectations on key economic indicators in the next 12 months: unemployment, interest rate, exchange rate and prices,
- (e) assessment of government performance,
- (f) expectations on consumers' income,
- (g) consumer sentiments on buying conditions and consumer intentions to buy houses, consumer durables and cars in the next 12 months,
- (h) index of expectations on prices of selected commodities, and
- (i) index of expectations on expenditures by commodity group.

For more details on the Consumer Expectations Survey, contact Ms. Ludivina Gador, Bank Officer at the Department of Economic Research of BSP, at lgador@bsp.gov.ph.

The Bureau of Agricultural Statistics (BAS), in response to the challenges posed by its data users for further articulation of the condition in the rural sector, has embarked on developing a **Rural Sector Statistical Information System-Rural Profile (RSSIS-RP)**. The framework is being set up under the World Bank assisted project "Statistical Capacity Building in the Rural Sector." The objective is to provide building blocks for a comprehensive, integrated, well-managed and sustainable statistical information system for the rural sector and may result in developing a dual information system: a macro RSSIS that is based on data inputs from national surveys and administrative reporting systems and a community level RSSIS or **Community Level Statistical Information System (CLSIS)** with data inputs coming mostly from community initiatives. The latter could serve as a better tool for more targeted poverty alleviation programs/interventions, as the system would be capable of pinpointing the roots of poverty in the Philippines.

The RSSIS-RP framework served as overall backbone of the CLSIS. The series of

consultative meetings demonstrated interest among community leaders in selected municipalities and barangays in setting up a CLSIS towards development of a mechanism that will promote accuracy and timeliness of statistical information. It has three-fold objectives:

- (1) develop the capacity of the community leaders in the barangay (the lowest political unit) to set in place a socio-economic statistical information that conforms to the prescribed Philippine Statistical Standards and Classification;
- (2) assist national and local government units to improve targeting, tracking and monitoring of emerging developmental concerns such as poverty and food insecurity; and
- (3) serve as a tool for improved governance and delivery of basic government services at the community level.

The four provinces of Central Visayas region served as the pilot areas for this undertaking. These are: Cebu, Bohol, Negros Oriental and Siquijor. The reconnaissance mission and consultation workshops undertaken in the four sites ascertained the status of the government unit's information system, determined the training needs and the number of personnel that will be trained and ascertained other technical assistance needed to enhance the statistical capacity at the community level.

Trainings on primary data collection, admin-based and database management systems, data analysis, report writing and information dissemination and data processing and computer operations provided to the Local Government Units (LGUs) and barangay officials served as statistical capacity building for the rural folks. Equipped with basic knowledge on the importance of developing a CLSIS and provided with computers from the project, they are now ready to use the system developed by the IT consultant to come up with reports in table formats that they can use in their planning and program formulation.

Replication of this activity in other municipalities in the region and the interest of other regions as well are indications that the success of a CLSIS can be achieved in many parts of the country through information

dissemination of the benefits it will provide to the communities.

For more details on the Community Level Statistical Information System, contact Mr. Romeo S. Recide, Director of the Bureau of Agricultural Statistics at rsrecide@mozcom.com

The Philippine Statistical System (PSS) through the National Statistical Coordination Board (NSCB) is holding the **Ninth National Convention on Statistics (NCS)** on October 4-5, 2004. The NCS which is conducted every three years aims:

- (1) to provide a forum for exchanging ideas and experience in the field of statistics and for discussing recent statistical developments, prevailing issues and problems of the PSS; and
- (2) to elicit the cooperation and support of statisticians and professionals in related fields from the government, academe and private sector to work towards a more responsive statistical system.

The Convention serves as the kick-off activity of the nationwide and month-long celebration of the 15th National Statistics Month, an event held in October every year. The theme for this year's celebration is "Rising Beyond Global Challenges Through Quality Philippine Statistics." The two-day Convention is a gathering of professionals and practitioners in the field of statistics and involves presentation of a number of papers in various topics and holding of commercial exhibits. Coinciding with the 9th NCS is the conduct of the International Conference on Official Poverty Statistics and the ASEAN Task Force Meeting on Statistical Classifications in the Philippines.

For more information on the convention, you can visit its web page at <http://www.nscb.gov.ph/ncs>.

Poland
Janusz Wywiał

Problems of optimal sample allocation for small area estimation were considered on the basis of empirical data connected with household research conducted by the Central

Statistical Office. The accuracy of estimators was analysed through simulation studies. These studies lead to several conclusions about reasonable determination of sample sizes of stratified samples, two-stage samples, etc. For more details please contact: G. Dehnel, dehnel@novci1.ae.poznan.pl and E. Gołata, elzbieta.golata@ae.poznan.pl.

Stratified sampling schemes are often used in agricultural surveys conducted in Poland by the Central Statistical Office. Usually in this case the population is right skewed. Hence, the units with the largest value of the survey variable have too great an influence on the accuracy of the estimates of total values. Therefore a "take-all" stratum approach is proposed to create the strata. The so-called random search method algorithm solving an appropriate problem of the optimal stratification is applied to the stratification of the population of farms on the basis of data from the 2002 Agricultural Census. The cereals area was used as the stratification variable. For more details please contact M. Kozak, m.kozak@stat.gov.pl.

Spain
Montserrat Herrador

In recent years there has been an increasing demand for Service Sector statistics to satisfy the requirements of the European Statistical System as well as the needs of the regional authorities within the country. This fact has forced the National Statistics Institute in Spain (INE) to carry out a larger number of business surveys as well as to increase substantially the sample size of some current surveys performed by INE. There are two clear examples of these cases that are described on the following lines: (1) The process for providing Service Sector Activity Indicators (SSAI) at the regional level, and (2) The new Survey of International Trade in Services.

The objective of the **Service Sector Activity Indicators (SSAI)**, elaborated by INE, is to measure the short-term evolution of the activities of enterprises that operate in the services sector in Spain by means of two variables: turnover and employment. Sectors investigated are trade, tourism, transport,

information and communication technologies and other services. To reflect the evolution of the most important sector of the Spanish economy, the results are presented in the form of indices with the objective of measuring variations with respect to base year 2000.

Until now, in order to comply with European Union Council Regulation on the subject, the indices provide data on the national total and 30 activities approximately on the basis of monthly information. To obtain this a continuous survey is carried out that investigates, every month, about 11.000 companies that operate in those sectors. The population framework is the Central Business Register (CBR) which is generated from administrative registers and structural INE business surveys. The two variables that serve to stratify the population of companies are activity and size according to the number of employees. In each stratum, companies are selected with equal probabilities except for those strata whose companies have 200 or more employees that have been investigated exhaustively.

In order to attend the increasing demand from regional administrations in Spain, from 2005 the autonomous community (Regions) will also be taken as stratification variable; the sample size will be, every month, about 25.000 companies. In this way, the indices will measure variations on the regional total and for the five sectors too.

The new Commission Regulations on Community statistics concerning balance of payments, international trade in services and foreign direct investment will take effect from 2006 and will require yearly statistics, at national level, by countries. However the current data provided by the Cash Registers of the Spanish Central Bank (due to introduction of the Euro in the Monetary Union) is not enough to cope with required data for Services and, consequently, there is the need of setting up a new **Survey of International Trade in Services**.

Under such circumstances, this current year, INE has performed a pilot survey in order to establish a new statistical operation that allow us to obtain not only the data required by European Commission but also more

desegregated data needed for national statistics.

So, in 2005 a new continuous survey will commence. Every month about 10.000 companies will be investigated to obtain information relative to import and export services for estimating, at national level, different items referred to the following groups:

- Transportation
- Travel
- Communications
- Construction
- Insurance services
- Financial services
- Computer and information services
- Royalties and license fees
- Other business services
- Personal, cultural, and recreational services
- Government services
- Memorandum items

The population framework is the CBR taking into account only those companies that do not belong to the Cash Register and perform operations of international service trade. The frame will be stratified by activity and by the number of employees. In each stratum, companies will be selected with equal probability. However, some companies will be large enough to be assigned to self-representing strata and will be selected with certainty.

On the other hand, the information from those companies belonging to the Cash Register of the Bank of Spain, whose operations of trading in services are habitual, will be incorporated into the information of this survey to fulfil European requirements. A particular protocol of collaboration, INE/Tax Administration/Central Bank of Spain, has been established to build sampling frames for the target population. For more information, please contact Montserrat Herrador, herrador@ine.es.

United States
Ronald Fecso

The United States Economic Research Service (ERS) and National Agricultural Statistics Service (NASS) have developed two new tools for improved access to data from the **Agricultural Resource Management Survey (ARMS)** program. ARMS is the only national survey that provides observations of field-level farm practices, the economics of the farm business operating the field (or dairy herd, poultry house, etc.), and the characteristics of the household operating the farm - all collected in a representative sample. ARMS has been used by many policy makers, farm organizations, and researchers but access to individual data has been limited to on-site work within ERS or NASS offices.

The first approach is a "public" tool which will allow anyone to construct custom data tables. Those requests will access a large file of first level summary data so there is no possibility of revealing individual, confidential data. This summary approach will be of particular interest since the ARMS data collection will now have statistical reliability at the state level, for 15 leading agricultural states, as well as at the national level. Thus, people may be interested in examining some previously published national relationships at the individual state.

Through new software and data management procedures, including strict firewall protection, researchers in cooperative relationships with ERS and NASS will have desktop access to customized data summaries. These enhancements will make analyzing natural resource, technology adoption, farm business, and farm household issues less costly and more efficient. The same innovations will permit NASS State offices to produce customized data summaries for their customers. Requesters can not retrieve individual data records but can submit data calculation requests or models; data summaries which meet confidentiality restrictions will be returned. Researchers must submit a formal research proposal for scrutiny and approval and have written support from their institution before being cleared for this new access. For more information please contact Ronald Fecso, rfecso@nsf.gov.

The **Committee on National Statistics** of the National Academies recently released a report on Measuring Research and Development Expenditures in the U.S. Economy (see www.nap.edu). The report examines the portfolio of surveys of the Division of Science Resources Statistics of the National Science Foundation that collect data on R&D expenditures from federal agencies, universities, and industrial establishments. Data from these surveys have become the accepted measures of R&D spending and of public and private investment in areas of science and engineering. The report identified numerous areas for expansion and modification of the scope of data collection, including: measurement of process innovation in addition to traditional types of basic research, applied research and development; development of ways to capture not only R&D expenditures, but also their outputs in terms of short-term and long-term innovation; adapting the current surveys to better measure growing areas of R&D, such as the rising service sector, the increasing contribution of small firms in R&D, the shift in funding from manufacturing R&D to health-related R&D, changes in the geographic location of R&D, and the globalization of R&D; and identifying new forms of R&D, such as joint ventures and outsourcing arrangements. The report also identified areas for research and improvement involving data collection methodology, such as the problem of determining the reporting unit and respondent for the industrial survey; the skewed distribution of R&D expenditures among firms, which complicates efficient sample design; the need to systematize data editing processes; and the need to develop more refined classifications of R&D by field. The report was authored by the Panel on Research and Development Statistics at the National Science Foundation, Lawrence D. Brown (Department of Statistics, Wharton School, University of Pennsylvania), chair, and Thomas J. Plewes, study director. The National Science Foundation, in cooperation with the U.S. Census Bureau and other contractors, is working to implement the report's recommendations.

Coverage Adjusted Census of Agriculture Results Published in the United States

The National Agricultural Statistics Service (NASS) of the United States Department of Agriculture implemented many improvements in the **2002 Census of Agriculture**. The most apparent new approach was creating **coverage adjusted totals** at the U.S., state, and county level. This enabled publication of detailed data representing all farms in the country instead of just those on the census of agriculture mail list. Being able to provide this new "information" avoided past confusion about sizable differences between official statistics and census tabulated numbers. For example, the 1997 coverage adjusted number of farms is 2,215,876 compared to the originally tabulated 1,911,859. Equally significant is the fact that the 2002 results and the coverage adjusted 1997 results, provided clearer information on the structure of U.S. farming. The tabulated 1997 numbers indicated that 18.1 percent of farms had sales of \$100,000 or more when the actual percentage was 15.9. At the other end of the spectrum, 31.3 percent of farms in 1997 had sales of \$2,500 or less but the tabulated data indicated only 26.0 percent.

Area frame data were used to identify operators not on the census mail list and to form estimates for how many farm operations were missed and the characteristics of those operations. The adjustment technique used is referred to as calibration. State level estimates, including operations not on the mail list, were formed for key variables such as total numbers of farms and land in farms. Using information from the area frame survey to identify characteristics of operations missed by the mail list, the statistical routine that was run accounted for the types of missed operations by "re-weighting" the records received. The process identified existing records that best met the combined characteristics of the missed operations.

The reaction to providing coverage adjusted 2002 Census of Agriculture tables has been overwhelmingly positive. A briefing, in conjunction with the data release, was presented to reporters who cover most NASS reports. In addition, considerable time was spent, in person and by telephone, briefing

other reporters. Most reporters, once they grasped the adjustment concept, proceeded to write stories that focused on data level changes from 1997, not the adjustment process. Other statistical organizations, such as the Bureau of the Census, supported the calibration process and the fact that NASS provided adjusted 1997 as a bridge for data users.

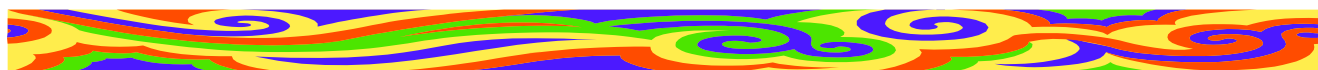
Another striking new data feature was estimating the number of U.S. farmers. Past censuses had concentrated just on the “principal” operator of each farm operation, even in cases where shared responsibilities obviously existed. That led to the misstatement that the U.S. had only two million farmers; the statement should have been that

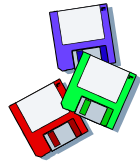
there were two million farms. The 2002 form asked how many individuals on each operation qualified as farm operators and how many were women. Some 62 percent of farms did report only one operator, but in total 3,115,172 operators were identified on the 2,128,982 farms. A total of 847,832 (27.2 %) were women.

Information on all 2002 U.S. Census of Agriculture results and products can be found at: www.nass.usda.gov/census/, where there are many choices for accessing special products, maps, and data features. U.S. data tables and detailed explanations are found under U.S. National Level Data.

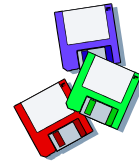
To All Members

- ◆ The IASS needs your contribution.
- ◆ Please do not forget to renew your membership.
- ◆ As of January 2002, French Francs are no longer accepted. As a consequence, the payment of dues and subscriptions must be made in either Euros or U.S. dollars.





SOFTWARE --- REVIEW



Software reviews over the last several years have presented summaries of the features of a number of systems or components of systems that deal directly with survey estimation issues, particularly sampling error and weighting procedures. They have addressed such systems as EpiInfo, Wesvar, SUDAAN, SAS sampling error PROCedures, Stata, IVEware, and software for generalized regression weighting. Some of this software is available for free over the internet, and others require payment of a licensing fee.

We are considering additional reviews, and we would like to get reader advice about

software that has not been reviewed to date, or for updated reviews on some software. We also would like to hear from you about whether there are software systems that address other survey sampling issues that you'd like us to review. Please keep in mind that we review only software that is available for purchase or for free download. We do not review proprietary or other software that our readers cannot purchase or access through a download.

Please send your advice and ideas to Jim Lepkowski, the review editor, at jimlep@umich.edu.



ASK THE EXPERTS

Anders Christianson

A number of questions have arrived in response to our calls in the last two issues of the *Survey Statistician*. Some of them have already been responded to, and those are reported here. In other cases an expert is working with a specific question, and we can look forward to more on the website and in this newsletter. The questions from members have, in some cases, been changed slightly, to make them more general and thus more interesting to all the readers. We want to thank those members who have submitted questions and of course the experts who have taken the time to provide their expert advice. We think that this communication mechanism between survey designers, giving examples taken from actual design problems, and survey methods experts, providing their comments to them, creates an interaction between survey methods research and survey practice that can improve the quality of surveys around the world.

Thus, we want to encourage members to pose more questions to us. Please send your question to: anders.christianson@telia.com. The questions and their responses will appear first on the web site <http://www.cbs.nl/isi/iass> and then in a coming issue of the *Survey Statistician*.

Q. How can imputation be trusted since it creates artificial values?

A. Jean-François Beaumont and Eric Rancourt, Statistics Canada

In one way or another, surveys have to deal with the problem of missing values. Different reasons may explain the presence of missing values, such as refusal to provide the desired information for at least one question or an impossibility to contact a given unit. Missing values can also be created at the editing stage of the survey in an attempt to resolve

problems of inconsistent or suspect responses. To deal with missing values, many estimation techniques such as maximum likelihood estimation, nonresponse weight adjustment and imputation can be used. Choosing to use imputation is often based on practical considerations. For instance, imputation is convenient for ultimate users since it creates a complete rectangular file, which can be used to obtain estimates of population parameters of interest as if there were no missing value. This property is particularly useful when dealing with item nonresponse, where missing values occur for some but not all variables in the survey. Also, imputation ensures some consistency between estimates produced by different users.

Although imputation is usually a very convenient method of compensating for missing values, it is well known that imputed values cannot be treated as true values when making inferences about unknown population parameters. In fact, the real goal of imputation is to help support estimation in order to make appropriate inferences rather than simply predict values of micro data. However, to achieve this goal, imputation does consist in predicting each individual missing value, but of course, this does not necessarily mean that the imputed value for a given unit is a high-quality estimate for the true unknown value. Imputation methods must be developed in such a way as to lead to reasonably high-quality estimates, at least at certain aggregate levels.

In order to make inferences in the presence of missing values, assumptions about the unknown mechanism that generates missing values, i.e. the nonresponse mechanism, are needed. These assumptions are called nonresponse model. This is to be contrasted to sampling theory, where the mechanism that generates samples is completely known to the

statistician. Often, the nonresponse model only requires that the nonresponse mechanism be independent of the variables of interest after conditioning on some auxiliary variables observed for all sample units. In such a case, a model for the variables of interest, i.e. an imputation model, is needed. The imputation model is usually the key to obtain efficient predictions, or efficient imputations, for the missing values. In particular, the use of auxiliary variables well correlated to the variables of interest is important to reduce the error in the estimates due to missing values. Therefore, to the extent possible, it is crucial to validate all model assumptions underlying the imputation strategy in order to make valid inferences in the presence of missing values. If a careful modeling effort is performed, then imputation can be trusted as a method of treatment of missing values.

Finally, it is important to note that missing values lead to estimates that are more variable than those that would be obtained if the entire sample could be observed. As a result, variance estimates derived under the assumption of full response are not valid in the presence of missing values. Therefore, the imputation strategy and/or the variance estimation approach must take imputation into account in order to make valid inferences.

These notions and the advantages and disadvantages of imputation as well as their properties and their impact on estimation will be discussed at the 2005 ISI session in Sydney during the IASS short Course C: Workshop on Editing and Imputation of Survey Data given by J. Kovar and E. Rancourt. For more information, please see the IASS website (<http://www.cbs.nl/isi/iass/>).

Q. What can I do to enhance the quality of retrospective reports?

R. Robert F. Belli, University of Nebraska

The quality of retrospective reports depends on the quality of autobiographical remembering. Errors arise because all remembering is reconstructive rather than reproductive, and the accuracy of memory reconstructions depend (among other things)

on the degree to which information is encoded when events occur, how well information is stored over time, and the extent to which the conditions at retrieval provide effective retrieval cues. With regard to retrospective reports, survey researchers only have some degree of control on the conditions of retrieval. As my work has shown, providing more effective retrieval cues in questionnaires can enhance the quality of retrospective reports. One line of studies has been based on using episodic cues to help participants overcome potential source monitoring errors, as can happen when people remember thinking about voting, or their usual voting behavior, as evidence that they had voted in the last election (Belli, Traugott, Young, & McGonagle, 1999; Belli & Moore, 2004). Another line of studies focuses on calendar-based interviewing methodologies, which permit an ability to utilize retrieval cues that exist within the structure of autobiographical memory to an extent greater than that permissible in traditional standardized question-list (Q-list) methods (Belli, 1998). Studies which have compared calendar-based to standardized Q-list interviewing methodologies have shown higher quality retrospective reports with the calendar-based approaches (Belli, 2004; Belli, Shay, & Stafford, 2001; van der Vaart, 2004). In many cases, additional costs in terms of increased interviewing time are negligible, and there have been no observed increase in interviewer variance, despite the more conversational and flexible nature of calendar-based interviewing (Belli, Lee, Stafford, & Chou, 2004). Finally, calendar-based interviewing has demonstrated its advantages in comparison to Q-list approaches with 2-year and life course reference periods, in both face-to-face and telephone modes, and in both paper and pencil and computer-assisted interviewing data collection methods.

Belli, R. F. (1998). The structure of autobiographical memory and the event history calendar: Potential improvements in the quality of retrospective reports in surveys. *Memory*, 6, 383-406.

Belli, R. F. (2004, August) Improving the Quality of Retrospective Reports: Calendar Interviewing Methodologies. Paper presented at the sixth international conference on logic and methodology,

Amsterdam, the Netherlands.

- Belli, R. F., Lee, E. H., Stafford, F. P., & Chou, C-H. (2004). Calendar and question-list survey methods: Association between interviewer behaviors and data quality. *Journal of Official Statistics*, 20, 185-218.
- Belli, R. F., & Moore, S. E. (2004). An experimental comparison of question formats used to reduce vote overreporting. Manuscript submitted for publication.
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- Belli, R. F., Traugott, M. W., Young, M., & McGonagle, K. A. (1999). Reducing vote overreporting in surveys: Social desirability, memory failure, and source monitoring. *Public Opinion Quarterly*, 63, 90-108.
- van der Vaart, W. (2004). The time-line as a device to enhance recall in standardized research interviews: A split ballot study. *Journal of Official Statistics*, 20, 301-317.

Q. What is a specification error in the context of a sample survey?

A. Paul Biemer, Research Triangle Institute.

The following excerpt from Biemer and Lyberg (2003) provides some information on this question:

“Specification error occurs when the concept implied by the survey question and the concept that should be measured in the survey differ. When this occurs, the wrong parameter is being estimated in the survey and, thus, inferences based upon the estimate may be erroneous. Specification error is often caused by poor communication between the researcher, data analyst, or survey sponsor and the questionnaire designer.

For example, in an agricultural survey, the researcher or sponsor may be interested in the value of a parcel of land if it were sold at fair market value. That is, if the land were put up for sale today, what would be a fair price for the land? However, the survey question may simply ask “For what price *would you sell* this parcel of land?” Thus, instead of measuring the market value of the parcel, the

question may instead be measuring how much the parcel is worth *to the farm operator*. There may be quite a difference in these two values. The farm operator may not be ready to sell the land unless offered a very high price for it - a price much higher than market value. Since the survey question does not match the concept (or construct) underlying the research question, we say that the question suffers from specification error.

To take this example a step further, suppose the survey analyst is only interested in the value of the parcel without any of the capital improvements that may exist on it such as fences, irrigation equipment, air fields, silos, out buildings and so on. However, the survey question may be mute on this point. For example, it may simply ask “What do you think is the current market value of this parcel of land?” Note that this question does not explicitly exclude capital improvements made to the land and thus, the value of the land may be inflated by these improvements without the knowledge of the researcher. A more appropriate question might be, “What do you think is the current market value of this parcel of land? Do not include any capital improvements in your estimate such as fences, silos, irrigation equipment, and so on.”

The question, “What do you think is the current market value of this parcel of land?” is not necessarily a poorly worded question. Rather, it is the wrong question to ask considering the research objectives. A questionnaire designer who does not clearly understand the research objectives and how data on land values will be used by agricultural economists and other data users may not recognize this specification error. For that reason, identifying specification errors usually requires that the questions be reviewed thoroughly by the research analyst or someone with a good understanding of the concepts that need to be measured in order to properly address the research objectives. The research analyst should review each question relative to the original intent as it relates to the study objectives and determine whether the question adequately reflects that intent. For the land values example, the agricultural economist or other analyst who will use the data on land values would be the best person to check the survey questionnaire for

specification errors. In general, detecting specification error usually requires a review of the survey questions by researchers who are responsible for analyzing the data to address the research objectives and who know best about what concepts should be measured in the survey.

Note that in some disciplines (for example, econometrics), specification error means including the wrong variables in a model, such as a regression model, or leaving important variables out of the model. In our terminology, specification error does not refer to a model, but a question on the questionnaire.”

It should also be noted that specification errors are more common in business and institutional surveys than in household surveys.

Q. What is the bias of p , for estimating a proportion P when misclassifications occur?

A. Anders Christianson, Sweden

The misclassification model can be used as a survey model for dichotomous variables. It postulates the existence of two misclassification probabilities:

α = the probability that an individual, who actually has not got the characteristic under study, erroneously is classified as having it.

β = the probability that an individual, who actually has got the characteristic, erroneously is classified as not having it.

These two error types are usually called “false positives” and “false negatives” using terminology from medical diagnosis where the model has been extensively used.

The mathematical expectation of p is:

$$E_p = P(1 - \beta) + (1 - P)\alpha$$

And the bias

$$B_p = E_p - P = \alpha - P(\alpha + \beta)$$

The bias of the estimator p is thus a linear function of P with the intercept α and slope $-(\alpha + \beta)$

If $P = 0$ the bias will become α since all positive responses will be false positive ones.

If $P = 1$ the bias will become $-\beta$ since all negative responses will be false negatives.

On $P = \alpha/(\alpha + \beta)$; that is if $\alpha/\beta = P/(1-P)$ the estimator p will be unbiased.

Example: If both misclassification probabilities are 0,05 and the parameter under estimation 0,10:

$$\alpha = \beta = 0,05 \quad P = 0,1$$

The expectation of p is $E_p = 0,14$ and the bias $B_p = 0,04$.

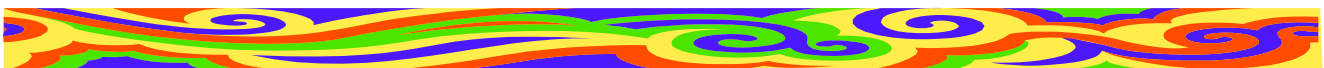
Q. We have designed an establishment survey to provide estimates of value added on the ISIC 1-2 digit level. Is it possible to obtain estimates on the 3 and 4 ISIC level using small area estimation techniques?

A. J. N. K. Rao, Carleton University

Suppose that simple random samples are drawn independently from each ISIC 2 digit level group, treating the latter as strata. Also let us assume that the group-specific direct estimates of value added provide adequate precision on the 2 -digit level. The question is whether the sample data can also be used to make reliable estimates of value added on the lower 3 and 4 level groups. Clearly, direct estimates treating the lower level groups as domains will be inadequate due to unduly small sample sizes in many of the domains (even zero in several 4 level groups). It is therefore necessary to employ indirect estimates based on small area (or domain) techniques. Such estimates “borrow strength” by using the sample values from related domains, thus increasing the “effective” sample size in the domains. These values are brought into the estimation process through a model (explicit or implicit) that provides a link to related domains through the use of supplementary data related to the variable of interest, such as recent census counts and

current administrative records. Availability of good auxiliary data and determination of suitable linking models are crucial to the formulation of reliable indirect domain estimates. Explicit models should be preferred because (1) such models can be validated from the sample data, (2) efficient indirect estimates can be derived under assumed models, (3) estimates of mean squared error can be obtained, and (4) variety of models can be developed depending on the complexity of data structures. A model-based indirect estimate is typically of the form of a weighted average of a direct estimate and a

“synthetic” estimate if the domain sample size is non-zero; otherwise, it has the form of a synthetic estimate that uses data from all the domains that are linked together. It is better to try small area estimation techniques on 3 level groups first before going to 4 level groups. A detailed account of small area estimation techniques is given in my book “*Small Area Estimation*”, Wiley 2003. The book “*Indirect Estimation in U.S. Federal Programs*”, Springer 1996, edited by W. A. Schaible provides applications of indirect estimation in U.S. Federal Programs.



Articles

The Launching of the IASS in Vienna 1973

Anders Christianson

The first large-scale appearance of the IASS took place during the 39th ISI session in the castle of Hofburg, Vienna, Austria, August 18-30, 1973. These are some personal memories of this event, based on my report to my employer by that time, the Audience and Research Department of the Swedish Broadcasting Corporation. I was also a student of Tore Dalenius's, professor at the University of Stockholm, where he taught sampling and survey theory. He was the one who encouraged me to enroll in the Association and attend the session.

Tore was one of the founders of the Association, together with other legendary survey statisticians like P C Mahalanobis (who died before the session), Morris Hansen, Leslie Kish, and Ivan Fellegi. The latter had laid down excellent work as chair of the organizing committee of the IASS part of the conference. All invited papers meetings were organized jointly with ISI and published in the proceedings, whereas you had to be present to collect hand-outs for contributed papers. Some of the contributed papers were, however, published in the Indian journal *Sankhya* afterwards.

Still today, many statisticians working outside of the survey field believe that our association is devoted to survey sampling solely. No doubt, sampling was, and still is, a major subject of ours. However, the most important reason for the creation of the IASS was to address major *limitations* of sampling theory. Those had been identified in articles written by P C Mahalanobis and W E Deming, the major one being that sampling theory was a theory for true values that did not take into consideration measurement errors.

This was very exciting to me, because in my job with methodology for TV audience surveys

based on telephone interviewing, I had realized that sampling was not the only source of error; we had also nonresponse and recall bias, to mention the two most serious ones. Of particular interest to me was therefore Gad Nathan's presentation of experiences of sampling and nonsampling errors in Israel, since one of the examples was TV audience surveys. Gad reported a study in which a one-day recall period was compared to a one-week period. The longer recall period was found to be better because the increase of recall bias was more than balanced by the decrease of sampling error. This was presented in a meeting on the balance between the two sources of errors, organized by Tore Dalenius. Contributions to this meeting came also from Fellegi & Sunter, Canada, and Jabine & Smith, USA. So, you could design a survey subject to a mean square error criterion rather than a sampling variance criterion, thus incorporating measurement bias into the design. Later on, we used a similar criterion to improve the quality of the Swedish TV audience surveys. I think that there is still a need to bring up similar issues on our conference agendas.

Many invited and contributed errors addressed nonsampling errors, how to control them, and bring them together with the sampling errors in a survey model. The US Bureau of the Census survey model was hot at the time, and efforts to estimate its components in different applications were presented by Ivan Fellegi, Canada, and Fred Smith, UK.

Sampling theory was by this time a theory for the estimation of a restricted number of parameters, e. g., arithmetic means, ratios, and totals. However, an optimally designed stratified sample for the estimation of a mean is not necessarily a good one when you want to estimate a regression slope. This limitation was addressed in an invited papers meeting, Analytical uses of and inferences from sample surveys, organized by J N K Rao, Canada.

Superpopulation models was a new concept to me. It was introduced by Scott & Smith (UK) and others to address a third limitation of sampling theory: that it was a theory for finite populations, whereas we often are more interested in the superpopulations (I think that we rather call them processes today) that generate them. However, in my report, I noted that even though this might be true, It may be a good start to study the finite populations that the processes generate.

Sampling got its share as well. Foundations of survey sampling (organized by C E Särndal, Canada) Sampling in two or three dimensions with respect to ecological problems (A R Sen, Canada) and Large scale multipurpose computations of sampling errors (L Kish, USA) were titles of invited papers sessions. In addition a number of contributed papers were devoted to sampling problems. Other topics treated were, Multi-subject surveys, Sample surveys in the private sector, and Dual system estimates.

It was very stimulating to take part in this conference. There were excellent presentations and refreshing discussions on different subjects throughout the IASS program, and I came back home with a number of ideas for future survey methodology research. One reflection that comes to my mind now that I am writing this is: How could they organize it so well without the e-mail? The Austrian hosts excellently organized the whole conference. The social program included tours to the surroundings and a marvelous Farewell Heuriger party. Also the weather was on our side, presenting a warm late summer sun. I remember my favorite place to cool down in the weekend was the pool in Krapfenwald.

Most of all I remember all the new friends that I got. I can still meet them at IASS conferences, remembering that in Vienna we were all young and handsome.





We are very pleased to welcome the following new members:

Australia	Sanjeet Johal	(Senegal)	Rabi Hassan Ali Moussa Maman Hassan Maman Nafiou Issiaka Said Hacim Kacim Moussa Koche Beifith Kouak Tiyyab Monir Mouhidine Atoumane Ndiaye Alaya Ouarme Moctar Seydou Djiga Thiao
Belgium	Peter Slock		
Burkina	Noguebzanga J. Luc Yameogo		
Cameroon	Ignace Roger Kamga Tchwaket		
China	Ming Ming Xiao		
Comores	Monir Mouhidine		
Croatia	Vlasta Bahovec Natasa Kurnoga Zivadinovic	Sweden	Fredrick Strohkirch
Italy	Chiara Colleoni	United Arab Emirates	Juma Alhosani
Mauritius	Harish Bundhoo	United Kingdom	Marcos Vera-Hernandez
Niger	Boureima Adamou	United States	Stephanie Eckman Dang Sizemore Terry Tran
Philippines	Ferdinand Tamoria		
Senegal	Boureima Adamou Arouna Ali Mahamadou Boubacar Arbi Yaye Ramatoulaye Dieye		

Dear New Member:
 For questions or input regarding *The Survey Statistician*,
 please contact:
 Steven Heeringa
 Institute for Social Research
 426 Thompson St., Rm 4046
 Ann Arbor, MI 48104 USA
sheering@isr.umich.edu



Announcements

German Statistical Society

We would like to inform you that the address of the German Statistical Society has recently changed.

German Statistical Society
c/o University of Cologne
Albertus-Magnus-Platz
50923 Cologne
Germany

phone: +0049 (0) 221 470 4130
fax: + 0049 (0) 221 470 5084
E-mail: post@dstatg.de
Web: <http://www.dstatg.de>

President of the society is now Prof. Dr. Karl Mosler

Vice president: Prof. Dr. Reiner Stäglin

Vice president: Walter Radermacher

Managing director: Nana Dyckerhoff (from January 2005)

The following persons are members of the board:

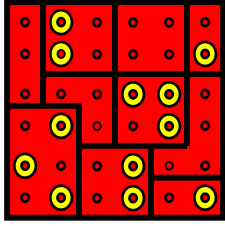
Prof. Dr. Ursula Gather, Prof. Dr. Stefan Mittnik, Prof. Dr. Ulrike Rockmann, Ulrich Scheinost, Rudolf Schulmeyer, Prof. Dr. Mark Trede,

Editor of AStA: Prof. Dr. Wilfried Seidel (from January 2005)

Treasurer: Dr. Almut Steger

Best regards,

Ute Hoheisel
Sekretariat
Seminar für Wirtschafts- und Sozialstatistik
Universität zu Köln
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Statistics Canada Survey Methods and Practices

Statistics Canada has published a guide to survey planning, design and implementation entitled ***Survey Methods and Practices***. It is a practical guide to common survey taking situations and designs. It is aimed at those involved in planning, conducting or managing surveys and at students of survey design courses.

Specifically, this book explains: how to formulate survey objectives and design a questionnaire; what to consider when designing a survey; how to determine the sample size, allocate the sample across strata and select the sample; data analysis, data dissemination and disclosure control; the use of administrative data; how to choose between different collection methods and how to organise and conduct data collection operations; data processing along with methods of quality control and quality assurance to minimise and control errors during various survey steps; and how to plan and manage a survey. This publication includes a fictitious survey designed to illustrate the steps in the development of a general household survey, according to the methods and principles presented in the corresponding chapters of the book. For more information, visit www.statcan.ca/english/IPS/Data/12-587-XPE.htm.



Quantitative Methods in the Social Sciences (QMSS)

The European Science Foundation is supporting a programme of workshop/seminars for junior researchers to undertake high level training in the latest developments in quantitative methods. These events will take place at venues across Europe in the summers of 2005 and 2006. For more information see <http://www.s3ri.soton.ac.uk/qmss/>

ANNOUNCEMENT & CALL FOR PAPERS



Statistical Methodology

The Official Journal of the International Indian Statistical Association

Editor-in-Chief: G.J. Babu stamet@stat.psu.edu



Statistical Methodology presents articles on fundamental aspects of statistical theory as well as on significant applications. In addition to helping to stimulate research, Statistical Methodology aims to bring about interactions among statisticians and scientists in other disciplines broadly interested in statistics.

Statistical Methodology will cover traditional areas such as:

- statistical inference
- sampling theory
- multivariate analysis
- regression analysis
- design of experiments
- time series

and will give special emphasis to established as well as emerging applied areas. A partial list of such applied areas includes:

- biostatistics
- astrostatistics
- biometrics
- quality management
- bioinformatics
- process monitoring
- environmental statistics
- reliability
- industrial statistics
- survival analysis
- physical statistics
- operations research
- social statistics
- financial data modelling
- business statistics
- data mining

We invite your submission

Statistical Methodology will contain research papers, review articles, papers with discussions, and short communications on "teacher's corner" and "consultant's forum". On occasion, special events or topics will be published as a Special Issue of Statistical Methodology, prepared by a Guest Editor.

The journal encourages the submission of reviews of statistical applications and reviews of interdisciplinary conferences. All papers will be refereed.

Online submission and guidelines for authors are available at the Author Gateway:
<http://authors.elsevier.com/journal/stamet>.

For more information visit the journal homepage: www.elsevier.com/locate/stamet

CALL FOR MONOGRAPH PAPERS

METHODOLOGY OF LONGITUDINAL SURVEYS

International Conference to be held at the University of Essex, Colchester UK
12-14 July 2006

Conference website: <http://www.iser.essex.ac.uk/ulsc/mols2006>

Submissions are invited for monograph papers to be presented at the conference, Methodology of Longitudinal Surveys (MOLS 2006). It is anticipated that accepted monograph papers will be published in a book. We are currently at an advanced stage of negotiations with a reputable publisher. The conference is sponsored by the International Association of Survey Statisticians (IASS).

Monograph papers should address an important topic in the design, implementation or analysis of longitudinal surveys. The focus is primarily on surveys that involve collecting data from subjects on multiple occasions. Topics of interest include, but are not limited to, the following:

- Sampling for longitudinal surveys, include sample rotation, refreshment sampling and methods for dealing with population births and deaths;
- Sample management procedures and methods for tracing sample members over time and maintaining contact with sample members;
- Design methods for meeting dual requirements for longitudinal and cross-sectional estimates;
- Instrument design for longitudinal surveys, including the use of dependent interviewing;
- The effects of using different modes of data collection at different waves, multiple modes or changing modes;
- Issues in the collection of data from multiple members of a sampling unit (e.g. household, business), including the use of different respondents at different waves;
- Methods for minimising sample attrition;
- Assessment of non-response bias (unit and item) on longitudinal surveys;
- Adjustment methods for non-response and attrition, including weighting;
- Imputation and other methods for dealing with item missing data, especially wave non-response;
- Respondent conditioning and other measurement error issues specific to longitudinal surveys;
- Methods for estimating measurement error that are unique to panel data;
- Use of administrative data to enhance longitudinal surveys;
- Methods for disclosure avoidance and privacy protection in the release of longitudinal data files;
- Ethical issues on longitudinal surveys, including confidentiality and consent;
- Variance estimation for panels, rotating panels and other complex designs;
- Analysis methods specific to repeated measures or duration and event data;
- Analysis of longitudinal survey data under complex designs and informative sampling;
- Nonsampling and sampling errors in panel data analysis;
- Other issues in the analysis of longitudinal survey data.

Monograph papers should provide a review of research and practice in a particular area or present important new research which is likely to have broad relevance. Submissions will be screened by the MOLS 2006 scientific committee, who will select papers that collectively provide coverage of all relevant topics. It is intended that the monograph book will provide an authoritative review of the subject.

Submissions should consist of an abstract of approximately 500 words, describing clearly the topic that will be addressed and the material that will be drawn upon. Please also include the names, affiliations and email addresses of all authors. Abstracts should be submitted to p.lynn@essex.ac.uk by 24 January 2005, preferably as a Word document. Informal enquiries regarding possible submissions are also welcome to this address.

Authors will be informed whether or not their submission has been accepted by 18 March 2005. Details of the process for drafting and revising papers will then be communicated to monograph authors: this will involve submitting a first full draft by December 2005, a revised draft by May 2006, in time for circulation to conference participants, and a final manuscript by December 2006. Monograph authors will present their paper at the conference. The conference registration fee and three nights accommodation and meals will be provided for one author of each monograph paper. Unsuccessful monograph submissions will be treated as submissions for contributed papers unless the authors indicate that they do not wish this.

For further details of the conference, see the website: <http://www.iser.essex.ac.uk/ulsc/mols2006>.



ISI 2005

Sydney, Australia 5 – 12 April 2005

Register now!

It is not every year that you will have a business reason to visit Australia. So next year be advised that the 2005 Session of the International Statistical Institute (ISI) will be held in Sydney, Australia, from 5-12 April.

As a professional statistician, if you want to stay in touch with the latest developments in the field, it is hard to beat the ISI.

If you are intending to participate, it is highly recommended that you register now to take advantage of the early bird registration fee. To register please visit the Session website www.tourhosts.com.au/isi2005 and complete the online form. Even if you are undecided as to whether to attend or not you should register your interest to ensure you are kept informed about the Session developments.

Have you seen Information Bulletin II? Information Bulletin II provides the latest details on the arrangements for the 2005 ISI Session and the final registration form. A copy is available on the ISI Website www.tourhosts.com.au/isi2005. If you would prefer a hard copy email isi2005@tourhosts.com.au and a copy will be sent to you.



"Come to Sydney!" Stephen M. Stigler (l.) President, International Statistical Institute, and Daniel Berze, Director, International Statistical Institute, at a site inspection in Sydney this year. The 55th Session of the ISI is scheduled for next April 5-12.

Scientific Program

The Scientific Program for the ISI Session will feature leading keynote speakers from around the world and more than 100 scientific Sessions.

Geoff Lee, Local Program Committee Chair and Head of ABS's Methodology Division said "... the Invited Program was shaping up really well. The opportunity to attend a Session of the ISI in Australia is a once in a lifetime opportunity."

The Scientific Program will be supplemented with tutorials and short courses. Special theme days will cater to those with interests in finance and statistics, environmental statistics and genomics.

Details on the Scientific Program, including the full list of Invited and Contributed Paper Meetings, are listed on the 2005 ISI website at www.tourhosts.com.au/isi2005.

For paper submission and Scientific Program schedules see the website www.tourhosts.com.au/isi2005 for more details.

Key note speakers

Renowned mathematical biologist Lord Robert May and econometrician Professor Clive Granger have been confirmed as key speakers at the 2005 Session of the International Statistical Institute (ISI) scheduled for Sydney next April 5-12.

Lord May, an Australian by birth, obtained his doctorate in theoretical physics from the University of Sydney in 1959 at the age of 23. He is a world authority on mathematical biology.

In 2000, he was appointed for five years as President of the Royal Society of London, a position with a rich tradition and one of the most esteemed in the world of science. That followed a five-year appointment as the Chief Scientific Adviser to the British Government and Head of the Office of Science and Technology, playing an influential role in national scientific affairs.

Lord May holds a Royal Society Professorship jointly in the Department of Zoology, Oxford University, and at Imperial College, London, and is a Fellow of Merton College, Oxford.

Clive Granger shared the 2003 Nobel Prize in Economic Sciences with Robert Engle for their discoveries in the analysis of time series data. The work has fundamentally changed the way that economists think about financial and macro-economic data and has led to significant breakthroughs in Statistics and Macro-economic forecasting.

Professor Granger is also noted for developing a formal statistical notion of causality based on which variables help to predict other variables. His discovery is widely used and is commonly known as "Granger causality". He is now Professor Emeritus at University of California, San Diego (UCSD).

Key Dates

Before 31 January 2005 – Early Registration fee cut off

After 31 January 2005 – Late Registration fee applies

4 March 2005 – Speakers to email their presentations to the Conference Managers.

4 April 2005 – Registration for the Session commences

5 April 2005 – Session opens

12 April 2005 – Session closes

Satellite Meetings

A number of satellite meetings will be held before or after the 2005 ISI Session. A list of the satellite meetings is given below

31 March – 2 April 2005: Issues for Official Statistics for Small Countries (especially island nations) Noumea, New Caledonia (www.stat.fi/iaos/future_activities.html)

29 March – 1 April 2005: 14th International Workshop on Matrices and Statistics, Auckland, New Zealand (<http://iwms2005.massey.ac.nz>)

4- 5 April 2005: Statistics Education and the Communication of Statistics, Sydney, Australia (<http://www.stat.auckland.ac.nz/~iase/conferences.php?show=iase2005>)

13 - 16 April 2005: Fourth International Symposium on Business and Industry Finance, Near Cairns, Queensland, Australia (www.action-m.com/isbis4)

14 – 15 April 2005: Measuring Small Populations, Wellington, New Zealand, (www.stats.govt.nz/ISIsatellitemeeting)

General Schedule

General Schedule				
	Morning	Early Afternoon	Late Afternoon	Evening
Monday 4 April	Short Courses	Registration Short Courses	Registration Short Courses	
Tuesday 5 April	Registration Short Courses	Registration Short Courses	Opening Ceremony Short Courses	Welcome Reception
Wednesday 6 April	Scientific Meetings	Scientific Meetings	Scientific Meetings	Optional Social Event
Thursday 7 April	Scientific Meetings	Scientific Meetings	Presidents IPM Meeting	Australiana Night
Friday 8 April	Scientific Meetings	Scientific Meetings	Scientific Meetings	Optional Social Event
Saturday 9 April	Scientific Meetings	Excursions	Excursions	Optional Social Event
Sunday 10 April	Excursions	Excursions	Excursions	Optional Social Event
Monday 11 April	Scientific Meetings	Scientific Meetings	ISI General Assembly	Farewell Party (optional)
Tuesday 12 April	Scientific Meetings	Scientific Meetings	Scientific Meetings	

Social Program

The Social Program will be a highlight of the Session and has been designed to provide participants with an opportunity to relax and maximise networking opportunities.

The following events are **included** in the registration fee for delegates and accompanying persons:

Tuesday 5 April 2005	Opening Ceremony "Centenary Celebration – from Dreamtime to the Future"
Tuesday 5 April 2005	Welcome Reception "Faces of Australia"
Thursday 7 April 2005	Australiana Evening – "The Way of Life Down Under"

The following optional events* will be offered to delegates and accompanying persons.

Wednesday 6 April 2005	Discover the Historic Pubs of the Rocks
Friday 8 or Saturday 9 April 2005	A night at the Sydney Opera House
Sunday 10 April 2005	Australian Wildlife by Night
Monday 11 April 2005	Farewell Party "A Floating Affair"

* Optional events are not included in the registration fee.

See the website www.tourhosts.com.au/isi2005 or Bulletin II for more details.

Register TODAY!!

If you are interested in participating in the 2005 ISI Session please complete the online registration form at www.tourhosts.com.au/isi2005 or return the Registration Form in Bulletin II to the Conference Managers. Participants who register before January 31, 2005, are entitled to the discounted Early Bird fee. Even if you are undecided about attending, you should register your interest to ensure you are kept informed about the Session developments.

Contact Details

ISI 2005 Conference Managers
GPO Box 128
SYDNEY NSW 2001
Telephone: +61 02 9248 0800
Fax: +61 2 9248 0800
Email: isi2005@tourhosts.com.au
Website: www.tourhosts.com.au/isi2005

NEWSFLASH
See the ISI 2005 website for
the latest Session information.
www.tourhosts.com.au/isi2005



Come and see Sydney, an exciting and cosmopolitan city located on one of the largest and most beautiful harbours in the world.



Visit the new and improved IASS web site and
read *The Survey Statistician* on line!

<http://www.cbs.nl/isi/iass/survstat.htm>



More about the IASS
Becoming a member
Services for members
Survey Statistician
Publications
IASS Conferences
Ask the experts
Links
What's new

International Association of Survey Statisticians (IASS)

The Premier World Organization representing who's who in Sample Survey and Census Methodologies

FOUNDATION AND OBJECTIVES:

Founded in 1973, the International Association of Survey Statisticians (IASS) has as its charge and mandate to promote the study and development of the theory and practice of sample surveys and censuses. It also aims to increase interest in surveys and censuses among statisticians, governments, and the public world over.

MEMBERSHIP AND EXECUTIVE:

At present the IASS has approximately 1.200 members from 130 countries and 38 institutional members.

IASS headquarters are situated in Libourne (FRANCE) and operate, to a large extent, under the auspices of the French statistical agency INSEE, which lends its expertise and status to aid and promote the association's work.

The society is run by an Executive Committee elected for a period of two years and a Council elected for a four-year period.

Anyone interested in learning more about IASS should contact

Michel Péronnet
IASS Executive Director
3 rue de la Cité
33500 Libourne
France
33 (0)5 57 55 56 02
e-mail: michel.peronnet@insee.fr



Association Internationale des Statisticiens d'Enquête (AISE)

Important Notices

- ◆ A PDF file of the newsletter is available on the IASS web site. Currently, a few members prefer to be notified only when a new issue is posted, instead of receiving the hard copy. At this point we do not have a process in place to support this option. A process will be developed when an adequate number of members choose the above. Until that time, all members will continue to receive hard copies of the newsletter. Please send an e-mail to sheering@isr.umich.edu if you would like to take advantage of this option.
- ◆ Members are encouraged to view the IASS website (www.isi-iass.org) and provide comments or suggestions to Eric Rancourt: eric.rancourt@statcan.ca.

In Other Journals



SURVEY METHODOLOGY

A Journal Published by Statistics Canada

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Journal of Official Statistics
An International Review Published
by Statistics Sweden

An International Review Published by Statistics Sweden

JOS is a scholarly quarterly that specializes in statistical methodology and applications. Survey methodology and other issues pertinent to the production of statistics at national offices and other statistical organizations are emphasized. All manuscripts are rigorously reviewed by independent referees and members of the Editorial Board.

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