Survey Statistician the

The Newsletter of the International Association of Survey Statisticians

No. 87

January 2023















The Survey Statistician No. 87, January 2023 Editors:

Danutė Krapavickaitė (*Vilnius Gediminas Technical University, Lithuania*) and Eric Rancourt (*Statistics Canada*)

Section Editors:

Peter Wright Country Reports
Ton de Waal Ask the Experts

Maria Giovanna Ranalli New and Emerging

Methods

Alina Matei Book & Software

Review

Production and Circulation:

Maciej Beręsewicz (*Poznań University of Economics and Business*), Natalie Shlomo (*The University of Manchester*)

The Survey Statistician is published twice a year by the International Association of Survey Statisticians and distributed to all its members. The Survey Statistician is also available on the IASS website at http://isi-iass.org/home/services/the-survey-statistician/

Enquiries for membership in the Association or change of address for current members should be found at the section **Promoting good survey theory and practice around the world** on p.11 of this issue or addressed to: isimembership@cbs.nl

Comments on the contents or suggestions for articles in the Survey Statistician should be sent via e-mail to the editors Danutė Krapavickaitė (danute.krapavickaite@gmail.com) or Eric Rancourt (eric.rancourt@statcan.gc.ca).

ISSN 2521-991X

In this Issue

- 3 Letter from the Editors
- 4 Letter from the President
- 5 Report from the Scientific Secretary

7 News and Announcements

- Congratulations, Monica Pratesi
- · Congratulations, Carl-Eric Särndal
- Waksberg award
- Orbituary
- Call for papers for JOS
- Promoting good survey theory and practice

12 Ask the Experts

 Mixed mode official surveys. Current status and near future By Barry Schouten, Jan van den Brakel, Deirdre Giesen, Annemieke Luiten and Vivian Meertens. Reviewed paper

27 New and Emerging Methods

 Using Social Media to Enhance Survey Data by Annamaria Bianchi, Camilla Salvatore and Silvia Biffignandi. Reviewed paper

35 Book & Software Review

- Multiple Imputation of Missing data in Practice Basic Theory and Analysis Strategies by Maria Michela Dickson. Reviewed paper
- Multiple Imputation of Missing Complex Survey Data using SAS®: A Brief Overview and An Example Based on the Research and Development Survey (RANDS) by Yulei He and Guangyu Zhang. Reviewed paper

48 Country Reports

- Argentina
- Australia
- Canada
- Croatia
- Estonia
- FranceGermany
- Netherlands
- New Zealand
- Peru
- Portugal
- Switzerland
- United Kingdom
- Ukraine
- United States

62 Upcoming Conferences and Workshops

- 65 In Other Journals
- 73 Welcome New Members!
- 74 IASS Executive Committee Members
- 75 Institutional Members



Letter from the Editors



Dear readers,

We are happy to present the January 2023 issue of The Survey Statistician.

First, we would like to wish you all a Happy New Year 2023. In particular, we wish to all readers peace everywhere in the World for this is a necessary condition for the development of statistics.

This issue starts with the *Letter from the President* by Monica Pratesi, where she highlights a number of successful achievements of the IASS through some still difficult times and as countries are getting back to some normalcy. It is followed by the *Report from the Scientific Secretary*, Giovanna Ranalli where among other things, she underscores solid participation to the Webinar series and increases in the number of our followers on social media.

In the News and Announcement section, congratulations are expressed to Monica Pratesi on the occasion of her 60th birthday and to Carl-Erik Särndal who celebrated his 85th birthday and the 30th anniversary of the Model-Assisted Survey Sampling book. Congratulations are also expressed to Roderick Little and Raymond Chambers who are respectively the 2022 and 2023 recipients of the Waksberg award. This section also remembers Tim Holt who recently passed away. Finally, there is a call for papers for a special issue of the Journal of Official Statistics on integrating data from multiple sources for production of official statistics.

In the Ask-the-Experts section, Barry Schouten from Statistics Netherlands and Utrecht University; Jan van den Brakel from Statistics Netherlands and Maastricht University; Deirdre Giesen, Annemieke Luiten and Vivian Meertens from Statistics Netherlands discuss the current status and future of mixed-mode official surveys. They argue that in the context of declining response rates and in general, surveys will have to adapt and the mode is a powerful feature to enable this.

In the New and Emerging section, Annamaria from University of Bergamo, Camilla Salvatore from University of Milano-Bococca and Silvia Biffignandi from Consultancy in Economic Statistics Studies (CESS) describe how social media can be used to enhance survey data. They propose a modular framework to produce smart statistics and indicators.

In the Book and Software Review section, Maria Michela Dickson from the Department of Economics and management, University of Trento presents the book: Multiple imputation of missing data in practice – Basic theory and analysis strategies. It is then accompanied by a practical paper by Yulei He and Guangyu Zhang Division of Research and Methodology National Center for Health Statistics, U.S. Centers for Desease Control and Prevention on how to use SAS® to conduct multiple imputation.

Then follows the country reports, the list of upcoming conferences and recently published articles in various journals. We would like to express our many thanks to the section editors for their attentive and timely work. This work resulted in 15 interesting country reports to the current issue of TSS. Thank you also to Peter Wright for editing these 15 country reports.

The health of *The Survey Statistician* depends on participation by many members. If you have any information about conferences, events or just ideas you would like to share with other statisticians – please do go ahead and contact any member of the editorial board of the newsletter.

The Survey Statistician is available for downloading from the IASS website at http://isi-iass.org/home/services/the-survey-statistician/.

Danutė Krapavickaitė (danute.krapavickaite@gmail.com)

Eric Rancourt (eric.rancourt@statcan.gc.ca)



Letter from the President

Dear Friends of the IASS,

The year 2022 still saw us going through difficult times and we all tried to identify solutions in different unique ways to keep us healthy and safe from the ongoing pandemic. Thankfully things have been under control in most of the countries and all of us are gradually limping back towards normalcy.

I am happy that amongst all these hardships, wars and difficult times in many countries we have still been able to keep our mission of Promoting good survey theory and practice around the world.

We were successful in conducting IASS webinar programs ourselves and in collaborations with other organizations throughout the year. You will be pleased to know that a series of webinars on survey methods, inference from surveys and other data sources have already been put in place and are available on the IASS website. These webinars are open access and can be used by our members all over the globe for learning purposes. This has been facilitated by our active IASS Executive Committee members along with the colleagues of ISI PO. The lectures are all available on the IASS website for you to revisit and share.

IASS has organized and promoted competitions to award scientific prizes to its members: the new Hukum Chandra prize to Prof. Torabi who provided a special invited webinar on October 26th. See: http://isi-iass.org/home/events/iasswebinar-22-2022-hukum-chandra-prize-winner/, to contribute in research areas of Hukum's work. The 2023 recipient of the Waksberg Award is Prof. Ray Chambers, who will give the Waksberg Invited Address at a special IASS Invited Papers Session at the World Statistics Congress and publish a paper in Survey Methodology. The traditional Cochran-Hansen Prize will be awarded in 2023 for the best paper on survey research methods submitted by a young statistician from a developing or transition country. See http://isi-iass.org/home/cochran-hansen-prize/.

IASS promoted Invited Paper Sessions (IPS) Proposals to the 64th WSC 2023. There were 18 submitted invited papers session proposals sponsored by the IASS to the 64th WSC in Ottawa. An evaluation and selection process is now being undertaken by the Scientific Programme Committee of the 64th WSC chaired by Prof. Mark Podolskij.

Following the steps of the IASS strategy for 2022-23, we ended this year with the IASS's Recruitment drive — a letter from the President and the President-Elect, that has been spread throughout our networks using also our new IASS social media accounts, to increase our membership and reinforce IASS representatives in each country. I am sure that the networks of our scientific community continue to expand with solutions and opportunities through IASS communication plan and social networks. I hope that the coming year will come with a safer world to live in and work with our families and friends, and will allow unrestricted travel to consolidate our friendship and sharing of knowledge during ISI-IASS supported conferences.

I take this opportunity, on behalf of the IASS board, to convey our season's greetings to all of you and wish all a happy, peaceful, safe and healthy 2023.

With my best wishes,

Monica Pratesi

IASS President



Report from the Scientific Secretary

These past six months of activities for IASS began on July 14th with the IASS 2022 General Assembly where the IASS annual report for 2021 and the IASS strategy for 2022-2023 were presented by our President and then unanimously approved. The IASS strategy can be found at the following address http://isi-iass.org/home/wp-content/uploads/IASS-Strategy2022-2023.pdf. IASS EC member Jairo Arrow has presented the financial report, I have reported on the scientific activity of the IASS, and Nikos Tzavidis has described the newly introduced Hukum Chandra Prize. TSS Editor, Danuté Krapavickaité has described the achievements of The Survey Statistician and IASS President Elect, Natalie Shlomo, has updated the members on IASS activities for the WSC2023. The slides presented at the Assembly can be found here: http://isi-iass.org/home/wp-content/uploads/IASS-GeneralAssembly_14072022.pdf

In a world where the buzz word is data integration, I thought that social media could be an interesting topic for the **New and emerging methods** section of this issue of The Survey Statistician. I am very grateful to Professors Annamaria Bianchi (University of Bergamo), Camilla Salvatore (University of Milano-Bicocca) and Silvia Biffignandi (CESS, Consultancy in Economic Statistics Studies) for having accepted my invitation to write a paper on **Using Social Media to Enhance Survey Data**. This contribution provides an overview on the role of social media data in survey research. After examining the characteristics and challenges of using social media data, the Authors discuss recent approaches on how social media have been used to enhance survey research and introduce a general modular framework for producing statistics taking advantage of the two data sources. Please, contact me if you are interested in writing an article for the "New and emerging methods" of future editions of The Survey Statistician.

The organization of the monthly **Webinar series** has continued, and we are particularly thankful to Andrea Diniz da Silva for her engagement. We have now reached Webinar number 24 and we are happy to have made it a monthly appointment that has attracted an audience of up to **five hundred registered participants**. Please, visit the webinar section of our website http://isi-iass.org/home/webinars/ for slides, that of ISI https://www.isi-web.org/events/webinars for upcoming and recorded webinars, and contact Andrea andrea.silva@ibge.gov.br if you have suggestions for topics and/or speakers for the upcoming Webinars. Those held in the last six months of 2022 have covered treatment of nonresponse, adjustment of self-selection in the Lithuanian Census, the development of the sample design for the new US integrated economic survey and two interesting "bridges": one between Design-based Inference and Design of Experiments and the other between Big Data and Sampling Methodology. The October webinar has been a special one, devoted to the presentation of the paper "Small area estimation: a novel approach on estimation of mean squared prediction error of small-area predictors" that granted Prof. Mahmoud Torabi the **first Hukum Chandra Memorial Prize**.

The EC of IASS has decided to support three initiatives in 2022 with 500 euros each: the 7th ITAlian COnference on Survey Methodology – ITACOSM2022 – "Survey Methods for Statistical Data Integration and New Data Sources" held in Perugia, Italy, on June 8-10; the Workshop on Survey Statistics Theory and Methodology, held in Tartu, Estonia, on August 23-26; and the one-day Workshop on Survey Data Management Strategies to Improve National Planning and Development, Ogun State Bureau of Statistics, held in Ogun State, Nigeria, on October 4. The new **Call for Conference Support for 2023** is now out. We will consider providing financial support for workshops, conferences and similar events that promote the study and development of the theory and practice of statistical surveys and censuses and associated subjects, and foster interest in these

subjects among statisticians, organizations, governments, and the general public in different countries of the world. To apply for support, please send a document project, including a budget sheet, to IASS President Monica Pratesi (monica.pratesi@unipi.it) and in cc to IASS Vice President Natalie Shlomo (natalie.shlomo@manchester.ac.uk) **before June 30th**. The complete info can be found here: http://isi-iass.org/home/wp-content/uploads/Call-for-Conference-Support-2023.pdf

During these past months, our social media activity has increased thanks to Annamaria Bianchi, our social media manager, who has continued to post about webinars, conferences, books, articles, prizes, the newsletter release and its contents, and the recent recruitment drive. The number of followers to the pages are increasing: since July, Twitter followers increased from 269 to 321, LinkedIn followers from 284 to 706 and Facebook followers from 54 to 100. We are very grateful to Annamaria for her efforts and dedication. Then, please, follow the updates on the life of IASS via **social media** and reading our **monthly Newsletter**. Other than webinars, information on conferences, on the recipients of awards and on call for nominations, it now features a **reading of the month** section in which we suggest monographs, special issues or edited books on topics of interest to the members of IASS. Please, feel free to contact me for news and info to be added in the Newsletter by the 15th of each month.

Maria Giovanna Ranalli

maria.ranalli@unipg.it
IASS Scientific Secretary

News and Announcements

Congratulations, Monica Pratesi!



Monica has been working as a Survey Statistician since 1995. Her research fields include small area estimation, composite indicators, inference in elusive population, non-response in telephone and Internet surveys, design effect in fitting statistical models. She has an interest in studying inclusive growth and in measuring poverty and living conditions.

Her scientific production in these areas includes over 100 publications including articles in national and international journals, chapters in monographs, edited books, working papers and notes produced in the context of conferences and seminars.

Monica is a full Professor of Statistics at the Department of Economics and Management of the University of Pisa and she is currently head of the Department for Statistical Production at ISTAT, the Italian National Statistical Office.

She has coordinated national and international research projects and has participated in European cooperation projects in the field of statistics, aimed at countries such as China, Tanzania, Romania and the Republic of Bosnia and Herzegovina. She has had numerous institutional positions held in Italy and abroad, such as President of the Italian Society of Statistics (SIS), Deputy Director of the Department of Statistics and Mathematics Applied to Economics of the University of Pisa, and Director of the Camilo Dagum/Tuscan Universities Research Center on Advanced Statistics for the Equitable and Sustainable Development.

She has exceptional leadership and organizational skills and has organized several workshops and conferences. Monica has been a member of the ISI since 2012, member of the IASS Executive Committee in 2015-2017, IASS President-Elect for 2019-2021 and is currently the IASS President for 2021-2023.

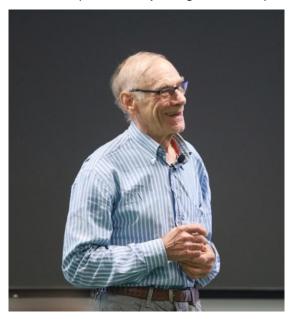
Monica celebrates her 60th birthday.

Dear Monica, we wish you a joyful life, unfading energy, creative and fruitful work and much happiness.

TSS editorial board IASS Executive Committee

Congratulations, Carl-Erik Särndal!

The Baltic-Nordic-Ukrainian Network on Survey Statistics has organized workshops and conferences every year since 1997. Carl-Erik has participated in most events, including the first workshop and the most recent one in 2022. Several generations of students, teachers and practising statisticians have had the opportunity to meet Carl-Erik, discuss with him and enjoy his lectures on important topics in survey statistics, such as the GREG estimator and calibration of survey weights, the various aspects of adjusting for nonresponse in surveys, and more.



At the 2022 workshop of the BNU network in Tartu, Estonia, we celebrated the 85th birthday of Carl-Erik. In addition, two of his significant works celebrated their 30th anniversary in 2022: the "Big Yellow Book" on model assisted survey sampling, written together with Bengt Swensson and Jan Wretman, and the milestone article on calibration estimators in survey sampling, published together with Jean-Claude Deville. It is impossible to overestimate the importance of these works to the survey statistics community. All middle-aged survey statisticians have studied survey sampling from the "Yellow Book", statistical offices around the world use calibration in their sample surveys.

Carl-Erik Särndal's work has received much international recognition among statisticians and professional communities. His awards include the Waksberg Award of 2007, by the American Statistical Association and Statistics Canada, the Morris Hansen lecture of 2010, established by the Washington Statistical Society, the Jerzy Neyman Medal of 2018, by the Polish Statistical Association, Honorary doctor's degree, by the University of Neuchâtel, Swizerland, in 2022.

His work and warm personality are an inspiration to many. His healthy lifestyle encourages everyone. Carl-Erik is famous for holding high jump world records in several age groups. Carl-Erik's bright thinking and open smile enrich the events of the BNU network.

Dear Carl-Erik, we are happy to have you among us and to learn from you and cooperate with you. We wish you happy days, good friends and enjoyment from survey statistics!

Steering Committee of the BNU network https://wiki.helsinki.fi/display/BNU/Home

References

C.E. Särndal, B. Swensson, and J. Wretman (1992). *Model Assisted Survey Sampling*, Springer, New York.

J.C. Deville, C.E. Särndal (1992), Calibration estimators in survey sampling. *Journal of the American Statistical Association*, 87, 376-382.

European Masters Athletics. https://www.european-masters-athletics.org/news-overview/1678-highlight-high-jump.html

Congratulations, Roderick Little and Raymond Chambers!





The recipient of the 2022 Waksberg Award, Prof. Roderick Little, has delivered the invited lecture on November 4th at the Statistics Canada Symposium. His article "Bayes, buttressed by design-based ideas, is the best overarching paradigm for sample survey inference" is published in the December, 2022, issue of *Survey Methodology*.

The 2023 recipient of the Waksberg Award, Prof. Raymond Chambers, has been announced. He will give an invited lecture and publish an exclusive article in *Survey Methodology* in 2023.

The journal *Survey Methodology* has established an annual invited paper series in honour of the late Joseph Waksberg to recognize his outstanding contributions to survey statistics and methodology. Each year a prominent survey statistician is chosen to write a paper that reviews the development and current state of an important topic in the field of survey statistics and methodology. The paper reflects the mixture of theory and practice that characterized Joseph Waksberg's work.

The author of the 2024 Waksberg paper will be selected by a four-person committee appointed by Survey Methodology and the American Statistical Association. Nomination of individuals to be considered should be sent by email before February 15, 2023 to the chair of the committee, Maria Giovanna Ranalli (maria.ranalli@unipg.it).

Previous Waksberg Award honourees and their invited papers can be found at: https://www150.statcan.gc.ca/n1/pub/12-001-x/award-prix-eng.htm

Tim Holt – Obituary



I was very sorry to hear of the sad passing of our former colleague Tim Holt at the age of 79.

Tim was the first Director of the Office for National Statistics, overseeing the amalgamation of the Central Statistical Office and the Office for Population, Censuses and Surveys in 1996.

During Tim's leadership of the ONS, he instigated the formal work on census under enumeration and pushed forward developments to improve business surveys.

Tim dedicated his life to the improvement of statistics, not just here but across the world. Following his PhD in statistics at the University of Exeter, he worked with Statistics Canada to pioneer work on hot deck imputation as well as being one of the world's leading experts in survey sampling.

In the late 1980s he returned from Canada to become Professor of Social Statistics at the University of Southampton where he worked together with Professor Fred Smith. He led the development of one of the leading centres of excellence in survey sampling and social statistics globally.

I can honestly say that there are many national statistical offices around the world, as well as our own, whose work over the past four decades has been greatly influenced by Tim's work.

He will be greatly missed and our thoughts go out to Tim's family at this time.

Sir Ian Diamond, National Statistician

Call for papers to the special issue on integrating data from multiple sources for production of official statistics

The Journal of Official Statistics has the pleasure to announce an upcoming special issue on integrating data from multiple sources for production of official statistics from a methodological perspective. We welcome manuscripts on statistical methods related to incorporating data from new sources, such as:

- web-scraped data from online platforms and open data;
- travel surveys by GPS;
- smartphone data and data obtained by other handheld devices;
- data integration techniques for combining probability samples, non-probability samples, big data samples and similar;
- administrative data and data in public domain;
- methods for data integration such a small area & domain estimation, calibration mass imputations etc.;
- building up infrastructure and frameworks for data integration;
- quality issues related to integrating data from multiple sources;
- and other related methods and topics.

The Guest Editors for the special issue are Johan Fosen (Statistics Norway), Anders Holmberg (Australian Bureau of Statistics), Ingegerd Jansson (Statistics Sweden), Danutė Krapavickaitė (formerly at Vilnius Gediminas Technical University), and Ton de Waal (Tilburg University).

Submission guidelines and deadlines

Manuscripts should be submitted through the manuscript management portal ScholarOne https://mc.manuscriptcentral.com/joffstats.

All manuscripts must adhere to the JOS submission and peer review rules and will go through the usual JOS review process. Instructions for authors are available at Author Guide (clarivate.com) . JOS is an open access journal. For more information about JOS, see Journal of Official Statistics (JOS) (scb.se).

For all articles of JOS, see the JOS-archive at JOS archive (1985–2012) (scb.se)

The deadline for submission is June 30, 2023.

Promoting good survey theory and practice around the world

The International Association of Survey Statisticians (IASS) aims to promote the study and development of the theory and practice of sample surveys and censuses.

It also aims to increase the interest in surveys and censuses among statisticians, governments and the public in the different countries of the world.

Dear statistician,

Join the IASS and become a member of an association of 430+ survey statisticians!

To become a member (never before a member of the IASS nor of the ISI):

You have to register first at Login (isiwebshop.org), an activation link will be sent to the email address you entered. Note that you must activate the account by selecting the activation link in the email you receive. If you don't see the email in your Inbox, please check your SPAM box or your other email boxes. After activation, you can log in to https://www.isiwebshop.org/ using the username (email address) and the password you entered during registration.

Current members can renew their membership/s and update their contact details via the <u>webshop</u>. The username is the email address you used for your contact details and the password is your membership number, that is if you haven't customized it.

Should you require any assistance in becoming a member, renewing your membership/s, or forgotten your membership number please send an email to isimembership@cbs.nl