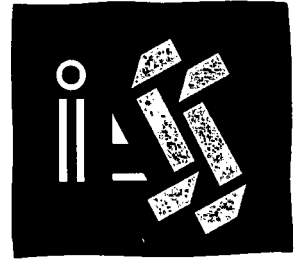


INTERNATIONAL ASSOCIATION
OF SURVEY STATISTICIANS



THE
SURVEY
TATISTICIAN

INTERNATIONALE
ASSOCIATION
DES STATISTICIENS
D'ENQUETES



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Letter from the President

Dear IASS Members:

I would first like to thank you for electing me as President of IASS. I hope I can justify the trust you have placed in me. We have many plans for the next few years, some of which are outlined in this note.

I should also acknowledge the considerable achievements made by our immediate Past-President, Lars Lyberg. Our extensive conference program has continued not only through Lars' leadership but through considerable personal effort he has put into organizing conference programs. Lars has also put a considerable effort into improving the presentation, content and timeliness of *The Survey Statistician*. We can all now see that his efforts are bearing fruit.

What should IASS concentrate on for the next two years? The membership survey conducted by Gösta Forsman provided much valuable information to help us plan activities. It reinforced that the main goal of IASS should be to improve communication between survey statisticians.

With the support of IASS Council, we plan do this through various means.

- a) We plan a vigorous conference program in several different parts of the world.
- b) As far as practicable, we will make available proceeding of conferences – IASS papers from the Beijing ISI Session will be distributed to all members.
- c) We will support publications containing material on survey methods.
- d) Committees can be a useful means of improving communication on a specific topic. We will look at whether we can make more effective use of committees.
- e) To improve communication, we will need to increase membership participation among

those countries with relatively few members (or no members in some countries).

Turning now to the conference program, we are planning IASS involvement in a number of conferences.

- a) We assisted with the promotion of a conference in Paris (hosted by INSEE) on privacy issues in survey taking.
- b) Plans for a IASS regional conference in Budapest in September 1996 are well under way.
- c) IASS will be one of the major sponsors of an International Conference on Computer-Assisted Survey Information Collection to be held in San Antonio in November 1996.
- d) We are planning a stimulating program for the 1997 ISI Session in Istanbul.
- e) A number of successful short courses were conducted prior to the 1995 ISI Session – we plan to repeat them prior to the 1997 ISI Session.
- f) A satellite conference will be held in Jerusalem immediately after the 1997 ISI Session – it will be held jointly with the IAOS and will be on longitudinal statistics.
- g) We have taken the preliminary steps towards a joint conference with the IAOS in 1998. We would like to hold it in Latin America and Mexico has expressed some interest in being host.

This is a very extensive and ambitious conference program – there should be plenty of opportunities for members to have contact with their international colleagues.

The Survey Statistician is our main publication. Over the last few years, much effort has gone into improving it. We will concentrate on consolidating these improvements in the presentation, content and timeliness of *The Survey Statistician*. Our new editor, Mike Brick, has tackled this task with great enthusiasm.

With the advent of electronic publishing, we should look at making *The Survey Statistician* available electronically through the World Wide Web to speed up access and reduce distribution costs. We had thought of setting up a committee for that purpose, but the ISI has established an electronic publishing committee (of which I am a member) and we thought it prudent to rely on developments with that committee. However, if there is a enthusiast out there who would like to help us move faster, we would support experimental activities.

The International Statistical Review (ISR) is another potential vehicle for papers of interest to IASS members. Recently, the ISR has devolved responsibility for a proportion of the ISR to the Sections. Nanjamma Chinnappa has been the Associate Editor, but this important role has now been taken over by Vice President, Chris Skinner. Please consider the ISR when preparing papers of a review or tutorial nature. I am sure Chris would welcome suggestions on material for our part of the ISR to supplement the valued Hansen series of lectures. The ISR is now being distributed free to all IASS members.

There is one other publishing activity we are planning. We have already arranged substantial discounts for both the *Journal of Official Statistics* and *Survey Methodology*. We will try to negotiate with publishers to get discounts on survey and sampling reference books, particularly for members from developing countries.

With the extensive use of electronic communications, our membership should reflect that form of communication. Our latest directory went some way but still has major gaps because our members did not provide the required information. We will seek telephone, Fax and internet addresses when next seeking membership subscription.

With respect to committee activities, we have a standing committee to look after the scientific program for the next ISI Session as well as Nominations Committee. We also plan to set up a committee to help us to establish how to improve communications with developing countries and increase membership from these countries.

Although our membership numbers in total are satisfactory; the membership survey showed that numbers are relatively small for developing and transition countries, among women, among younger survey statisticians, and among those who work in the private sector. We must make a special effort to increase membership among these groups. Conferences always provide a good opportunity, but to exploit this we need good promotional material. Lars Lyberg is preparing a prospectus to help us all with our recruitment efforts.

Clearly, cost is a limitation on membership from developing or transition countries. IASS could afford some free memberships, possibly identified through the national statistical offices with greater resources. Sponsorship is another possibility, possibly arranged through national statistical agencies. Any suggestions on how to tackle this problem would be most welcome.

I will be trying to involve all council members in IASS activities – all will be allocated a role. Interest is always greater if you are involved.

There is a limit to how much can be achieved with the voluntary efforts of busy people but I am confident we can improve knowledge of our craft through our collective efforts. The Council and I also welcome your contributions and suggestions.

Finally, I would like to wish you a very successful 1996.

Dennis Trewin
IASS President

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Analysis of Large Health Surveys
Edward L. Korn and Barry I. Graubard

Large-scale health surveys are becoming increasingly utilized to investigate associations between risk factors and health-related outcomes. Since these surveys record many variables on large numbers of individuals, they enable many hypotheses to be addressed, some of which may not even be formulated until years after the survey is completed. Additionally, these surveys are frequently population based, so

that potential biases of hospital-based studies are avoided.

From the point of view of the analyst, one disadvantage of large-scale health surveys can be their complicated multistage sampling design with differential probabilities of sampling individuals. Questions about how to appropriately analyze survey data with complex sampling designs and adjustments are not new; there has been much theoretical and empirical work done in this area (see Kalton (1983), Rao and Bellhouse (1989), and Skinner, Holt and Smith (1989) for excellent discussions). The choice of an appropriate analysis involves a trade-off between robustness and efficiency, or put more fundamentally, bias versus variance. Classical "design-based" survey methods tend to be more robust than model-based methods, but lack their efficiency. This is true not only for parameter estimates, but also for the estimation of standard errors. In theory, one could use the data themselves to help decide on an optimal analysis, but unfortunately they are frequently not informative on this issue.

Use of Sample Weights

Assume the linear model

$$y_i = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \dots + \beta_p x_{pi} + e_i \quad (1)$$

would have been used if data had been available on the whole target population. In this model the variable x_1 is taken to be of primary interest and the other x 's are considered as covariates. Weighted least squares estimators $\hat{\beta}^w$ using the model (1) with the sample weights w_i will provide approximately unbiased estimates of the finite-population β 's defined as the ordinary least squares (OLS) estimators based on the whole target population (Kish and Frankel 1974). However, their variability may be much larger than that of the (biased) unweighted estimators $\hat{\beta}$. We address the question of whether the preferred estimator is $\hat{\beta}^w$.

We estimate the efficiency loss in using $\hat{\beta}^w$ instead of $\hat{\beta}$ when $\hat{\beta}$ is in fact unbiased.

A design-based estimator of this inefficiency is

$$\text{Inefficiency}_0 = \frac{1 - \hat{V}ar_{psu-id}(\hat{\beta}_1)}{\hat{V}ar_{psu-id}(\hat{\beta}_1^w)} \quad (2)$$

where $\hat{V}ar_{psu-id}(\cdot)$ represents the Taylor series linearization variance estimator in which each individual is treated as a separate primary sampling unit (PSU), possibly chosen from a set of strata. These design-based estimators are readily obtained from any statistical analysis survey software, e.g. SUDAAN (Shah et al. 1991), by defining PSU's to be unique identifiers (id) associated with each individual. Other ways of estimating the inefficiency of the weights are presented in Korn and Graubard (1995).

Next, we describe a modeling approach for the situation when the inefficiency of using the weights in the analysis when they are not necessary is not acceptably small. We suggest the simple approach of augmenting the regression model with "exogenous" variables relating to the sampling design and then utilizing OLS estimates. By exogenous, we mean a variable that would be unaffected by the (hypothetical) random assignment of the variable of primary interest. An unweighted analysis with the exogenous variables should lessen the (potential) bias of the sampling design while retaining the efficiency of OLS. Assume that the original model considered was (1) with x_1 being the primary variable of interest. Consider the augmented model

$$y_i = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \dots + \beta_p x_{1p} + \gamma_1 d_1 + \gamma_2 d_2 + \dots + \gamma_q d_q + e_i \quad (3)$$

where d_1, d_2, \dots, d_q are derived from the exogenous design variables. The d_i could involve main effects of the design variables (e.g., race, sex), interactions among these main effects, and also interactions with the other covariates (x_2, x_3, \dots, x_p). Causal considerations suggest that controlling for exogenous design variables will lead to the coefficient β_1 in (3) will be of equal (or greater) interest to β_1 in (1), but do not suggest particular models as preferred. However, in choosing the d_i we exclude interactions with x_1 . Inclusion of these interactions would make it necessary to combine coefficients from main effects and these

interactions in order to obtain the single desired estimate of the risk factor/outcome association.

The exclusion of both non-exogenous design variables and interactions of the design variables with x_1 could lead to a bias in the OLS estimate of β_1 in (3). Although we are willing to accept some bias for the purposes of variance reduction, a statistically significant bias might lead to a reassessment. Consider a test of $H_0: \beta_1^{OLS} = \beta_1$ for model (3) that rejects for large values of $(\hat{\beta}_1^w - \hat{\beta}_1)^2 / \hat{V}ar(\hat{\beta}_1^w - \hat{\beta}_1)$ where the denominator is a design-based variance estimator of the difference (Graubard and Korn, 1993). With a rejection of H_0 for model (3), it is suggested that an approach based on the truncation of the sample weights be used (Korn and Graubard, 1995).

Many large surveys have approximately self-weighting designs, e.g., many of the component surveys of the World Fertility Survey (Verma, Scott and O'Muircheartaigh 1980). In such cases, design-based weighted estimates should be used, although there will be little difference between the weighted and unweighted estimators. In other cases, we offer the following recommendations:

- a) Evaluate the inefficiency of using the sampling weights when they are not necessary. To estimate this inefficiency, we recommend (2) unless a single decision is required for many analyses in which case there are other ways of computing the inefficiency that we recommend (Korn and Graubard, 1995). Note that (2) can be utilized for parameters other than linear regression coefficients, e.g., logistic regression coefficients for binary data or hazard ratios in survival analysis.

If the calculated inefficiency is small in absolute percentage or in its potential effect on a clinically meaningful association, then use weighted least squares estimates with the sampling weights as the individual weights in the analysis.

- b) If the inefficiency is not small then augment the regression model with the design variables that are exogenous. OLS estimates

of the estimated regression coefficients corresponding to these variables should then be calculated. If some of these coefficients are statistically significant, consideration should be given to adding interaction terms among these exogenous variables and other covariates in the model. Interactions with the main variable of interest x_1 should not be included. Nor should the estimated value of the primary regression coefficient β_1 or its statistical significance be used to guide the model fitting.

- c) For the final regression model of b), perform a statistical test of $H_0: \beta_1^{OLS} = \beta_1$. If this test does not reject at the $p < .05$ level, then base the analysis on this regression model using OLS estimates.
- d) If the test in c) does reject at $p < .05$, then truncate the sampling weights (Korn and Graubard, 1995). Base the analysis on weighted least squares estimates using these truncated sampling weights.

Estimation of Standard Errors

The complex multistage design of surveys can induce a correlation structure among the observations. Ignoring the sampling design and analyzing the data as a simple random sample (SRS) can lead to incorrect estimates of standard errors. Typically, the PSU population sizes vary and not all the observations in the sampled PSU's are subsampled. Instead, second and further stages of sampling may be quite complicated. The "ultimate cluster" approach to variance estimation uses the fact that all the variation of the estimator can be captured by examining the variability of the estimator at the PSU level (Hansen, Hurwitz and Madow, 1953, pp 257-258).

One potential problem with this design-based approach to variance estimation occurs when there are limited numbers of PSU's sampled. This leads to limited degrees of freedom for the variance estimation and the potential for a weak statistical inference. In particular, under strong regularity conditions (Korn and Graubard, 1990), the degrees of freedom for estimating a single variance are given by $d = \text{number of sampled}$

PSU's minus number of strata; see also below. One can calculate the approximate inefficiency in using design-based variance estimation when SRS variance estimation would have sufficed, that is, when the intraclass correlation is zero and there are no strata effects. One quantification of inefficiency is in terms of the decrease in sample size that would be possible by using SRS variance estimation under these conditions. This inefficiency is given by (Moser and Kalton 1971, pp 207-208):

$$\text{Inefficiency}_0 = 1 - \left(z^{1-\alpha/2} / t_d^{1-\alpha/2} \right)^2 \quad (4)$$

where $z^{1-\alpha/2}$ and $t_d^{1-\alpha/2}$ are the $1-\alpha/2$ percentiles of a normal distribution and a t distribution with d degrees of freedom, and α is the significance level for (two-sided) testing or one minus the confidence level for confidence intervals.

The potential inefficiency of design-based variance estimation becomes even worse if $p > 1$ variables need to be tested simultaneously (Korn and Graubard 1990):

$$\text{Inefficiency}_0 = 1 - x_p^{2(1-\alpha)} / \left(p F_{p, d-p+1}^{1-\alpha} \right) \quad (5)$$

where $x_p^{2(1-\alpha)}$ and $F_{p, d-p+1}^{1-\alpha}$ are the upper percentiles of a chi-square distribution with p degrees of freedom and an F distribution with p and $d-p+1$ degrees of freedom.

Many large health surveys have large numbers of sampled PSUs, e.g., the National Health Interview Survey (Massey et al., 1989) with approximately 200 PSUs. These surveys will have low inefficiency as given by (4) or (5) and therefore design-based variance estimation should be used. With surveys with fewer sampled PSUs, it is tempting to suggest examining the data for evidence of strata effects and/or intraclass correlations to help decide which methods to recommend for variance estimation. However, the data are frequently not very informative about the magnitude of such effects in these cases. Additionally, this position taken to the extreme can lead to computing p -values and confidence intervals by all possible methods and picking the one that looks "best."

Therefore, we attempt as much as possible to use only the design in making our recommendations for the estimation of standard errors:

- a) If the inefficiency calculated using (4) or (5) is low, then use the fully design-based estimation of standard errors. As in considering the inefficiency of weighting, low can refer to an absolute percentage, e.g., 10 percent, or a relative size compared to a clinically meaningful risk factor effect. If the inefficiency is not low, then consider recommendation b) below.

The logic behind this recommendation is that a small inefficiency is a small price to pay for a potentially more robust estimation of standard errors. If there is clustering in the data then the inefficiency calculation is not relevant, but using the design-based analysis is then an appropriate thing to do.

- b) Consider dropping the strata boundaries for the variance estimation. This is conservative, but may be too conservative if the stratification is important. However, in many surveys the stratification may not be that important for the causal parameter of interest. For these types of survey, recalculate the inefficiency using (4) or (5) with the strata boundaries dropped. If the inefficiency is low, then use an unstratified design-based analysis. If this inefficiency is not low, or if the stratification is deemed important, then consider the next recommendation:
- c) Ignore the PSU-level clustering and estimate design-based standard errors treating the SSU (second-stage sampling units) as PSU's. This should be done as a stratified analysis since there will be sufficient degrees of freedom. In some applications, second-stage sampling units such as enumeration districts will not be available for public use. In these situations, the largest sampling unit below the PSU which is available should be treated as PSU's in the variance estimation. This may involve treating households as PSU's, or possibly individuals. In the latter case we are recommending essentially a stratified SRS variance estimation.

- d) If recommendation c) is followed then one should test for the presence of an intraclass correlation at the PSU/SSU level (Korn and Graubard, 1995). If there is strong evidence of such clustering, then use the unstratified PSU level analysis instead of the SSU analysis.

Our recommendations have been quite specific so that survey users who are not highly experienced can easily follow them. For those statisticians interested in trying their own methods, we note that the data analyzed in this paper are available on public use data tapes from the National Center for Health Statistics. We appreciate that some will disagree with our recommendations and welcome suggested improvements.

For further information contact Barry Graubard at E-mail address: B63@CU.NIH.GOV.

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Quality Control in High Stakes Environment: The Case of the International Adult Literacy Survey (IALS) **T. Scott Murray**

On December 6, 1995 Statistics Canada and the OECD are scheduled to publish "Literacy, Economy and Society: the Result of the First International Adult Literacy Survey (IALS)". Several factors suggest that the IALS release will attract an extraordinary amount of attention, attention which transforms the study into a high stakes undertaking.

First, the study data is the first to provide, by design, a direct international comparable assessment of a skill thought important to human capital. The public and policy debates in

OECD countries is full of references to the importance of human capital in maintaining historical levels of incomes and economic growth at the national level. Evidence from Canada and the U.S. confirms a strong link between literacy and individual economic and social success. Thus, IALS is bound to capture the attention of national policy makers, politicians and media. This attention will be reinforced by the traditional association of literacy as a proxy for cultural development. IALS places national egos under a harsh empirical spotlight.

Second, IALS was based on a complex and operationally demanding research protocol, a protocol which blends household-based survey research and educational testing. To be successful, the study needed to ensure not only comparability of samples and background questionnaires but also psychometric equivalence of assessment tools across diverse languages and cultures.

Third, relative to traditional approaches, direct assessment of skills of the types employed in IALS are extraordinarily expensive. This fact alone translates into high expectations on the part of the sponsoring agencies. Given that language and literacy have long been considered to be so rooted in culture as to preclude international comparison, this goal of psychometric equivalence in and of itself represents a considerable risk.

Finally, in order to maximize the value to policy makers, IALS was designed to deliver data rapidly: the total life cycle of the study from conception to publication of first results, was three years. The luxury of time afforded other recent international comparative studies was not available to IALS. This alone has placed severe constraints on what quality control could realistically be implemented and raised the general level of risk associated with the study.

The objective of this article is to provide readers with an overview of the quality control measures which were built into the study to contain the risks alluded to above and to provide a capsule summary of achieved outgoing quality of the IALS study.

Statistics Canada began by forming a strategic alliance with the Educational Testing Service of Princeton, New Jersey to advise on the design of the assessment, to scale the test results and to evaluate the psychometric reliability of the test. ETS's professional standards and experience with such undertaking provided essential to controlling the risk psychometric "failure".

Next, the decision was taken to adopt a collegial style to the design, management and implementation of the study. An extraordinary amount of time was spent in educating and informing study participants of the rationale underlying the proposed design and the importance of particular design elements to the integrity and coherence of the study. As a result, national study managers introduced few modifications in implementation which posed a threat to quality.

IALS also incorporated a broad range of more standard statistical quality control measures including:

- Participants were provided with a set of explicit design criteria which they were obliged to respect and a related set of model instruments, administration procedures, and training materials.
- Participants were required to field a scientific probability sample.
- Each country was required to submit a detailed sample design document for expert review.
- Strict limits were placed on what adaptations could be made to test items. Final items and test booklets were reviewed by bilingual reviewers. Rules were also set to govern adaptation of the background questionnaire.
- Each country was required to field a pilot survey to acquaint themselves with the unique requirements of testing adults in their homes and to ensure that items included in the final test possessed the psychometric properties required to support international comparison.

- Comprehensive rubrics were developed for scoring test items in the pilot. This information was used to improve the scoring rubrics for the main study.
- Pilot items were subjected to blind rescore and all disagreements resolved. A three day meeting of chief scorers and national study managers was held to review the scoring rubrics. A central scoring inquiries center was established at ETS. Protocols were established to control scoring reliabilities both with and between countries. Score values were subject to 100 percent verification in data capture.
- Standardized coding structures were adopted for industry, occupation, educational attainment and adult education field of study.
- A standardized code book was adopted into which national data was mapped and a series of edits performed at Statistics Canada to ensure compliance.

The Results

Overall, the results of the IALS study are gratifying. Psychometrically, the test performed in a remarkably stable way. The fit of items and test characteristics curves is far better than expected across language and culture. For most of the ability range, where over 99 percent of the population is found, the deviation between observed and theoretic proportion correct is less than 0.01 for all languages and cultures. Interrater reliabilities, a measure of scoring quality, are extraordinarily high. Most are in the high 90's. Only 11 percent of the items (13 out of 114) were lost due to differential item response functions. The assessment was designed to withstand a 40 percent loss of items.

Analysis of the study results have revealed large enough differences between countries to imply significant economic and social consequences and sufficient information on covariates to inform the policy process.

On a less positive note, sample sizes in several of the countries are smaller than originally

expected. Nonresponse is uncomfortably high in a few of the countries and a variety of problems and possible sources of bias have been identified in realized samples and estimation systems. One country paid a modest incentive, another allowed a few respondents the use of a calculator and a third only paid interviewers if the respondent attempted the main task booklet.

Thankfully, these problems and departures from established procedures do not seem to have imparted serious bias to the study results. In summary, it is believed that IALS offers important new data for policy makers and provides an interesting model for containing the risks associated with such complex and politically visible international collaborative undertakings.

Post Script

Recent developments with respect to IALS hold an important message for anyone contemplating a similar adventure. Despite the general assertion made in this report that the study can support credible and reliable international comparison, one of the study participants has had second thoughts about publishing their results. This reluctance has precipitated an independent review of IALS quality which has more to do with politics than science. If only life were simple!

For further information, contact T. Scott Murray, International Study Director for IALS and Director, Special Surveys Division, Statistics Canada, E-mail: SCOTMUR@STATCAN.CA.

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Question/Answer

The first of the questions below comes from the IASS Workshops on Survey Sampling in Developing Countries (Cairo 1991, Padua 1993). As always, we welcome alternative views on the issues raised, comments on the answers provided, and especially other *good and practical questions*. Please send questions and observations to: Vijay Verma, 105 Park Road, Teddington, Middlesex TW11 OAW, UK, Fax:

Q33.1 A register of enterprises is used to select a stratified (by activity and size) simple random sample of enterprises. However, the register is outdated. During the survey it is found that some sampled enterprises have changed activities or size, and therefore currently belong to a stratum other than the one to which they belonged in the register. How can the sampling weights be adjusted to take this into account?

Some sampled enterprises no longer exist, while new enterprises that were not in the register cannot appear in the sample. How should these be treated?

Answer by Vijay Verma:

With an outdated frame, it is necessary to clearly distinguish two aspects of the problem: (i) changes in characteristics of units, such as in size and sector of activity, and (ii) changes in the population of units, such as due to closures and creation of new enterprises, during the interval between frame preparation and fieldwork.

The basic principle in dealing with (i) is that units retain their original weights, determined by how they were selected into the sample, i.e. by the sampling rate in their original stratum defined by their size, activity or other characteristics in the frame. In tabulating the results, the units are of course classified according to their new characteristics at the time of the survey, but *retaining the original design weights*. It is in fact a basic strength of the (proper) sampling method that survey results automatically reflect changes in characteristics of the units (albeit only for the units in the original population) since the time the frame was prepared. Note that the same applies when the units' classification are different between the frame and the survey not because of the real changes, but because of data errors in either or both sources. The frame and selection probabilities determine the weights, and the survey results determine the classification cells in the tabulations.

There is, of course, some loss in precision because of differences between selection domains (strata) and tabulation domains (cells). Usually, size-classification is used only to define broad strata, and the above is not a serious problem. However, a characteristic feature of establishment surveys is the requirement to report results by sector of activity in extreme detail (and hence the need to use equally detailed stratification in selecting the sample). In many of the reporting domains, therefore, the sample may contain only a few units, so that shifts of the units across boundaries of these domains may seriously reduce the precision of, or even make it impossible to produce, the required estimates. Some measures I have found useful in dealing with this problem include the following:

- Taking a larger sample in problematic sectors. Often past survey rounds or other sources can help in identifying such sectors prior to sample selection. If the survey logistics permit, a supplementary sample can also be added subsequently.
- Less commonly, and in more extreme situations, post-stratification adjustment on the basis of some external information.
- Convincing the user to accept less detailed reporting, e.g. by grouping the smaller sectors (this has often proved a surprisingly difficult exercise).
- Giving greater emphasis to results which are less affected by this problems, e.g. estimates of characteristics and proportions in preference to estimates of population numbers and totals. None of these affects the basic principle concerning the design weights noted above.

The second problem outdated frame in terms of the units included, is less tractable. Generally, this is much more problematic in economic surveys of establishments than in household surveys of the general population. From the population census, projections and other sources, usable external control totals are often available to adjust the results of general population surveys. This is hardly the case for the population of establishments, especially in less-developed countries. Changes in economic units

can be much larger and unpredictable, e.g. with booms and burst of the economic cycle. These changes are often uneven, concentrated, even in different directions, across different sectors. There seems to be a much greater concern with estimating the number in the population and totals rather than characteristics, distributions, and proportions in establishment surveys.

What can be done? The first and obvious advice is to try and improve the frame. This is not as 'pious' as it may sound. Often it is not necessary nor feasible to improve the whole frame uniformly, and it pays to concentrate resources where they would be most effective. In most situations *focused, partial solutions are better than nothing*. But apart from this panacea, I have used the following idea, and would like to submit it for discussion.

Often, *net changes* in the numbers of units in the population (new establishments or 'births', *less* closures or 'deaths') are appreciably smaller than *gross changes* (births and deaths separately), especially in strata of smaller units and more volatile sectors. For the same reasons, the extent of net changes may also be less variable across strata. By appropriately matched *substitution for closures* in the sample, we may effectively reduce the problem of frame incompleteness from missed total births to missed net changes only (births minus deaths). In establishment surveys using list frames, often important characteristics such as number of workers, sector of activity and location are available for choosing appropriate substitutes. Sometimes other characteristics – value-added, output, turnover, year began operations etc. – may also be available, especially if the frame came from an economic census. Furthermore, external aggregate measures are sometimes available to approximately correct for the missed net change in the number of units in the population or some of its domains. Such information is practically never available to adjust for the missed gross number of births.

Q33.2 "What are generalized variance functions? When are they used? Why are they not used more often?"

Answer by Leslie Kish:

First we should refer to "relvariances" $cv^2(\bar{y}) = var(\bar{y})/\bar{y}^2$ and to coefficients of variation $cv(\bar{y}) = ste(\bar{y})/\bar{y}$ (noted in Q/A 16.1). The term "relvariance" was introduced in Hansen, Hurwitz and Madow 1953 (HHM), 4.10. These statistics refer to sample estimates of the population values $CV(\bar{y}) = Ste(\bar{y})/\bar{Y}$, etc. These are used for simple expression of the variability of survey statistics. For example, a value of $cv(\bar{y}) = 0.017$ denotes a relative standard error of 1.7 percent in the statistic \bar{y} and that has a direct and simple interpretation by and for many readers of survey results.

Another obvious advantage comes from $cv(\bar{y}/f) = cv(\bar{y})$ that the cv for the simple expansion aggregates (\bar{y}/f) is the same as for the mean. The main advantage and function from dividing the variance by the statistic is to remove the units of measurement, so that it remains the same for centimeters as for kilometers, for dollars for liras, etc. Furthermore, whereas the σ_y for elements vary wildly, their $CV_y = \sigma_y/Y$ vary much less, as shown in several examples (HHM, 4.14).

Those examples and all the uses of CV involve positive values such as areas, productions, population counts, etc. They are not used, nor useful, for statistics that vary near or around zero, and become negative; such as changes, for example. CV s are often used for proportions p , but these cause problems. For example when $p = 0.1$ then $cv(p) = \sqrt{pq}/\sqrt{np^2} = 3/\sqrt{n} = 9(\frac{1}{3}\sqrt{n}) = 9(\sqrt{pq}/\sqrt{nq^2}) = 9cv(q)$, although p and $q = (1-p)$ refer to the same dichotomy and have the same standard error = $0.3/\sqrt{n}$ (Kish 1965, 2.5).

Variance computations were begun in large numbers about 50 years ago. Several problems were discovered. First, it was not possible to compute variances for the thousands of statistics arising from survey results. Second, even though that may be possible today, it is still not practical to present all sampling errors that can be computed. For both reasons, some averaging is needed. Population counts are often based on proportions P , and for simple random samples the population values would be

$CV^2(p) = Q/Pn$. However, this simple relation is disturbed both by design effects and by sampling variability as may be seen in the large departures of the actual survey results from the regression curves for average. These curves are displayed on double-logarithmic charts that obscure somewhat those large discrepancies between the model and the data (HHM 1953, Section 12B-15; and Wolter 1985, Ch 15).

Generalized variance functions (GVF) denote "a simple mathematical relationship connecting the relative variance of a survey estimator to the expectation of the estimator. ... then variance estimates can be produced ... by evaluating the model of the survey estimates, rather than by direct computations" (Wolter 1985, Ch 15). This attractive name (GVF) exaggerates the importance and usefulness of this concept, in my view. It would be nice if a simple method of averaging, close to the standard errors and to confidence interval, would provide models that would fit the data. However, the GVFs fail to provide those useful models.

In addition to the weaknesses of CVs noted above, other weaknesses of GVF appear when we compare them to design effects (defts) (Kish 1995). Defts remove the very large effects of the sample size n , which is the chief cause of the curves in the GVF. Second, defts also remove the units of measurement by dividing the variance of the statistic by the element variance S_y^2 . This seems to have a sounder theoretical basis than dividing by \bar{Y}^2 . Defts are chiefly functions of the cluster sizes and the rohs, the intraclass correlations. These vary greatly between variables and need to be treated separately (Kish 1995; Verma and Lê 1995; also Q/A 4.1 and 16.1).

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Preliminary Announcement

IASS/IAOS Satellite Meeting on Longitudinal Studies

An IASS/IAOS satellite meeting on longitudinal studies will be held in Jerusalem, after the ISI session in Istanbul, starting August 28, 1997. An international program committee is presently being created, but initial ideas for the program include covering aspects of both the design and analysis of sample surveys (prospective or retrospective), in which the same units are investigated with respect to several points of time or over periods of time. This would include fixed or rotating panel surveys. Longitudinal studies based on administrative data or on censuses would also be covered. The term 'Longitudinal Studies' is to be regarded in a general sense, but will be limited to studies with a predominantly statistical component. The possibility of a one-day workshop on a special related topic is also being considered.

A formal call for papers and further information will appear early next year. Survey statisticians interested in the meeting and those with ideas or suggestions are welcome to contact Gad Nathan, Central Bureau of Statistics, 91905 Jerusalem, Israel; Fax: +972-2-6553-319; E-mail: gad@olive.msc.huji.ac.il.

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Country Reports

Australia (from Susan Linacre)

A one-day workshop on **Survey Design and Analysis** is planned to be held in conjunction with the Sydney International Statistical Congress, July 8-12, 1996. This workshop will cover the following topics: minimizing and adjusting for non-response in household surveys; the application of model based and randomization based design; and the analysis of survey data. The workshop will have an emphasis on practical applications of techniques and will appeal to survey practitioners in both private enterprise and official statistics, and to academics and researchers in the field. Further information can be obtained from Susan Linacre (tel.: 61-6-2527163, Fax: 61-6-2531093, or by E-mail X.400 address - C:AU.PUB:TELEMEMO,O:ABS,UN:SISD.EXEC.

In March 1994, the Bureau of Immigration, Multicultural and Population Research (BIMPR) commenced the **Longitudinal Survey of Immigrants (LSIA)** to Australia, the most comprehensive survey of immigrants ever undertaken in Australia. Interviews will continue through to 1999. Around 5,000 recently arrived immigrants will be asked about their experiences prior to and following resettlement in Australia. The sample has been stratified by visa category and country of birth. Both questionnaire and sample design were developed from a prototype survey conducted from 1991 to 1994. The first survey interview is conducted five months after arrival, the second a year later, and the third two years after that. Linkages possible from the longitudinal approach will provide a comprehensive insight into settlement problems.

Altogether over 300 questions are asked at each interview, covering such topics as settlement decisions and support, education, assessment of overseas qualifications, remittances, finances, labour force status, English proficiency, housing, citizenship, perceptions of Australia, sponsorship, and health. One-third of interviews are conducted in a language other than English with 56 languages in all. More than half of these interviews are conducted with family or friends interpreting.

For more information about LSIA, contact David Ward, Bureau of Immigration, Multicultural and Population Research, tel.: 61-6-2642492, Fax: 61-6-2643780, E-mail: bimpr@netinfo.com.au.

Canada (from Gordon J. Brackstone)

The **National Population Health Survey (NPHS)** is designed to collect information related to the health of the Canadian population. The NPHS target population includes household residents in all provinces and territories, except persons living on Indian Reserves, Canadian Forces Bases, and in some remote areas. An institutional component of the survey covers long-term residents of hospitals and residential care facilities. The first wave of data collection ended in June 1995 and residents in 26,400 households were surveyed. As well as cross-sectional information, the survey will collect data from a panel of individuals at two-year intervals. Panel respondents constitute the longitudinal sample who will be surveyed for up to twenty years.

The questionnaire includes components on health status, use of health services, risk factors and demographic and socio-economic status. The special focus of the first wave was psychosocial factors that may influence health, such as stress, self-esteem and social support. Demographic and socio-economic information included age, sex, education, ethnicity, household income and labour force status. Data collection was carried out in four periods: June, August and November 1994, and March 1995, with a special follow-up of non-respondents in June 1995. The final response rate for the first wave was 88 percent. A public-use microdata file was released in the format of a CD ROM in September 1995. Provincial sharing files as well as customized tabulations are also available.

Data collection for the second wave of the survey will be carried out in 1996/97 in the same periods as the first wave to preserve seasonality patterns. The content of the questionnaire will include mainly the same components as in 1994/95, with a special focus on access to services and alcohol dependency. For more information, contact Gary Catlin (613-951-3830 or Fax: 613-951-4198), Health Statistics Division or Jackey

Mayda (613-951-2250 or Fax: 613-951-3100), Household Survey Methods Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

School Leavers Follow-up Survey, 1995: In 1991, Statistics Canada conducted a survey to identify the characteristics of school leavers and the consequences of leaving school. The survey interviewed 9,460 young people aged 18 to 20, and the study findings have been published in several reports in Canada. In the fall of 1995, Statistics Canada re-interviewed the same respondents in the 1991 survey in order to study the school-to-work transitions of these respondents, now aged 22 to 24. The survey collected information on their education and labour market activities since the end of high school. Of particular interest was an assessment of their skills, especially those which helped them to find a job (e.g., basic skills; communication skills; creative and critical thinking; technological skills; and workplace interpersonal skills). As the original survey did, the follow-up survey also made use of computer assisted telephone interviews. The preliminary results of this survey will become available in the spring of 1996. For further information about the School Leavers Follow-up Survey, contact Lynn Barr-Telford (613-951-1518 or Fax: 613-951-9040), Education, Culture and Tourism Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

Estonia (from Imbi Traat)

An important event in Estonian official statistics has been the co-operation with EUROSTAT and Statistical Offices of the other two Baltic Countries – Latvia and Lithuania. A joint declaration was signed on March 30, 1995, whereby these four statistical organizations declared the tasks and directions to bring local statistics into accordance with European standards. Existence of objective high quality and easily available statistics from various fields of the society is one of the preconditions for Baltic Countries to become members of European Union.

The Estonian Statistical Society has been working very actively to bring together people from various fields of statistical life – producers

and users of statistics, research workers and teachers. During the last 3 years, 7 conferences of the Society have taken place. The last conference held on September 19–20, 1995, with 102 participants, was devoted to the current situation of official statistics in the country.

Since 1993, sample surveys have become one tool for producing statistics in the Statistical Office of Estonia (SOE). Today two surveys – an Enterprise (including Trade) Survey, and an Income – Expenditure survey – are running continuously. The Continuous Labour Force Survey is about to start. Several one-time surveys including a Health study, an Adults Schooling Survey, a Time-Use study, and the next step of Estonian Family Birth study, will be undertaken in the near future. Results of the Living Condition survey, conducted together with Norway, have been received.

The Income and Expenditure Survey of Estonian Households which started in July 1995, was designed jointly by working groups from SOE and Tartu University. It is a continuous survey with results published monthly and quarterly. Sample families fill in the food diary for two weeks and the diary for other expenses and income for the whole month. In the rotation scheme, the same family is in the sample 6 times during 1.5 years. A systematic sample of 2000 persons for a month was taken from the Population Register and corresponding families were included in the sample. Though the register is not perfect, it is the best available source. In the first month overcoverage (14% of addresses were not living places) and wrong addresses (selected family didn't live at the registered address) were discovered. Replacement families due to wrong addresses were allowed. The replacement distribution is analyzed when receiving data. The response rate in the first month was 55 percent, i.e. 945 families gave back filled-in diaries. To compensate for nonresponse, the Response Homogeneity Group model was used. Twelve groups by family type, urbanization and wealth level were formed. Information to classify nonrespondents was received from a Family Picture questionnaire, completed by 66 percent of nonrespondents, and from indirect sources for other nonrespondents. First results of the Survey led to some suggestions to modify the

classification groups. Sampling errors are calculated and published for all-Estonia estimates.

In the situation where more and more scientifically correct surveys have to be planned and performed the shortage of experienced survey statisticians is a serious problem. Today, there are 2 survey statisticians in SOE, learning from literature and from experience in their own job. At the University of Tartu, 27 students of the Faculty of Mathematics have passed the basic course in survey sampling, available since 1993. It is very important to encourage graduate students to specialize in survey statistics. Umeå University with its Institute of Mathematical Statistics did this by establishing a scholarship in survey sampling for master students of Tartu University. From four applicants, one became holder of the scholarship. Survey statistician is a new profession in all Baltic Countries. Wouldn't it be a good idea to organize international survey sampling courses for graduate students, to draw the attention of young people to this subject, to let them learn from teachers with long survey experience and to let them create international contacts?

For further information, please contact Mr. Imbi Traat, Estonia, by E-mail: imbi@cs.ut.ee, tel.: 372-7-465 496.

Italy (from Claudio Quintano)

We have recently concluded an experimental study of the redesigned Family Consumption Survey of the National Statistical Office (ISTAT). The current survey collects income, food and non-food consumption expenses, and the possession of some durable goods for each family. The deterministic edit and imputation procedure will involve both automatic (forcing) and interactive changes to the data. The most relevant modifications to the old survey are a reduction of the diary compilation period from 10 to 7 days; rationalization of the questionnaire; a sample reduction pertaining in the first and second stages; and the adoption of a generalized automatic System for Control and Automatic Imputation (SCIA) for the correction of qualitative variables. The new survey will be introduced in 1997. In 1996, the official

estimates will be produced from the current survey, at the same time, the new survey will be conducted on a reduced number of families for the production process test and for the construction of linkage coefficients between the two series.

For further information, please contact Giuliana Coccia, FAM Service, ISTAT, via A. Ravà 150, 00142 Rome.

We have developed a user-friendly software in SAS to obtain sampling estimates by a weight-linked estimator. The sampling weights produced by this procedure have the following properties: they belong to a range containing the base weight whose limits are defined by the user; they respect the condition that the sampling estimates coincide with some known totals for the population of interest; and the linkages could be defined separately for each domain of study. The procedure requires only the definition of the auxiliary variable dataset for every sample unit and the known total dataset for every domain of study. This method will be adopted for all current ISTAT surveys of families and of enterprises.

For further information, contact Pietro Demetrio Falorsi, SME Service, ISTAT, Cesare Balbo 18, 00100 Rome, tel.: 39-6-06-46733183, Fax: 39-6-06-46733221.

We have completed the integration of the SCIA automatic generalized software for qualitative variables with a module for the application of deterministic controls. In the present version, the system represents an integrated complete tool for the identification and correction of casual and systematic non-sampling errors. Entirely based in its probabilistic part on the Fellegi-Holt methodology, SCIA guarantees respect for requirements of quality timeliness, minimum number of corrections, and preservation of simple and joint distributions of input variables. The implemented methodology in SCIA is currently used for the control of data in the Multiscope Survey on Families and Labour Force.

For further information, contact Giulio Barcaroli, SME Service, ISTAT, Cesare Balbo 16, 00100

Rome. Tel.: 39-6-06-46733218, Fax: 39-6-06-46733221.

Republic of Korea (from Seung-Kon Lim)

In Korea, September 1st has been declared as Statistics Day. The commemoration ceremony was held on September 19, 1995. The choice of September 1 as Statistics Day commemorates the passing of a Population Census Regulation on September 1, 1896. This regulation marked the first step in the development of statistical surveys for economic and social development.

The purpose of establishing a Statistics Day was: 1) to increase public interest and understanding of the importance of statistics; 2) to increase public cooperation in surveys at a time when cooperation is dropping due to privacy concerns; and 3) to encourage pride and morale among those who work on statistics.

This year's Statistics Day comprised such events as a ceremony, awarding of prizes, symposium, and a paper contest among university students. The Korea Statistical Association hosted the event while the co-sponsors were the National Statistical Office and the Korea Statistical Society. At this commemoration event, about 300 statisticians who work for central and provincial governments, public organizations, the academic world, the mass media and civil organizations attended.

At the Symposium, three topics were presented and discussed. The first topic was a retrospective and prospective review of statistical education and development. The second topic dealt with the transition of statistical organization and the survey method. The third topic addressed the directions of the national statistical system. Finally, the Commissioner of the NSO hosted a reception for the attendees and indicated his appreciation for their efforts for statistical development in Korea.

For further information, contact Sueng-Kon Lim, National Statistical Office, Republic of Korea, Hanta Bldg., 647-15, Yoksam-Dong, Kangnam-Gu, Seoul 135-080, Korea; tel.: 82-2-222-1833 ~ 35; Fax: 82-2-538-5343 or 538-3874.

Syria (from Ibrahim Ali)

The preliminary results of the 1994 population, housing, establishments and agricultural census were issued. The final results are expected to be available by the end of 1995.

The final results of the 1993 Maternal and Child Health Survey (MCHS) were issued. This survey was conducted in collaboration with other ministries and the Pan Arab Project for Child Development (PAPCHILD) of the League of Arab States. It aimed at providing health policy makers and health professionals with detailed information on the health status of Syrian mothers and children.

The final results of the 1993 Integrated Demographic Survey (IDS) conducted side by side with the MCHS were issued. The IDS focused on demographic factors that have implications for basic developmental issues, policies and programmes in the Syrian Arab Republic. The emphasis is to elucidate the relationship between maternal and child health demographic aspects and social economic characteristics at both the national and subnational levels, leading to the development of maternal and child health policies consistent with national development goals.

The Central Bureau of Statistics (CBS) is implementing a National Statistical System Capacity Building project, in collaboration with the United Nations Development Programme. This project aims at establishing a well-integrated national statistical system, nationally coordinated and technically controlled. It aims to strengthen the CBS in carrying out efficiently its role of assisting the ministerial statistical offices to produce their specialized statistics, so that the national statistical system is able to produce the relevant and reliable data needed for both daily management of the country and effective planning and monitoring of its economic and social development.

The CBS is undertaking a Labor Market Survey (1994) in collaboration with the International Labor Organization and in coordination with other concerned ministries. A sample of 1200 establishments of manufacturing industries was drawn to measure the demand for the labor force

in this sector while a sample of 13000 households was also drawn to measure labor force supply. Thus, the survey aims to present the supply and demand of the labor force in order to achieve homogeneity between educational planning and the requirements of human development. The findings will be issued soon.

For further information, please contact Dr. Ibrahim Ali, Director, Central Bureau of Statistics, Damascus, Syria.

United States (from Dan Kasprzyk)

In April 1995, questions on hunger and food security were added to the monthly U.S. Census Bureau's Current Population Survey. These questions which covered food expenditures, food assistance program participation, food sufficiency, food scarcity, strategies for food shortage coping, and concern about food sufficiency were sponsored by the Food Consumer Service (FCS) of the U.S. Department of Agriculture. Food Security is defined as the ability to buy enough food to maintain a healthy active life, and food sufficiency is simply having enough food. The questionnaire items measure a variety of life experiences, behaviors, and self perceptions that taken together can indicate household hunger and food insecurity. The results from this first annual survey are expected to be available in early 1996. For more information, contact the FCS Office of Analysis and Evaluation in Alexandria, Virginia, USA at 703-305-2019, and Fax: 703-305-2576.

A new methodology has been developed for deriving WIC eligibles estimates used annually to allocate WIC program funds to the states. WIC - the Special Supplemental Nutrition Program for Women, Infants, and Children - is a nutrition and health program administered by the U.S. Department of Agriculture's Food Consumer Service (FCS) for low-income pregnant and postpartum women, infants, and children

under age 5. In recognition of substantial scientific evidence showing WIC's effectiveness in promoting favorable birth outcomes and infant health, the U.S. Congress has significantly increased WIC funding for several years. Responding to this rapid program growth, FCS substantially revised its formula for allocating WIC funds among states.

The revised formula places greater emphasis on the number of eligible persons in each state as the basis for the calculation of state grants. This new emphasis, coupled with dramatic program growth, heightened widespread concerns about the need for timely, accurate state estimates of WIC eligibles to ensure equitable fund allocation and facilitate effective program administration.

In response to these concerns, Bayesian "shrinkage" estimation has been used to develop estimates for calculating state WIC grants for fiscal years 1995 and 1996. The shrinkage estimates are more timely than census estimates, which had been used for fund allocation in prior years, and substantially more precise than direct sample estimates from the Current Population Survey (CPS), the leading alternative to the census. Drawing on both census and CPS data as well as vital statistics and other administrative records data, the new shrinkage estimator optimally averages CPS sample estimates with predictions of WIC eligibles from a regression model. The predictions are based on observed changes in government program participation and other indicators of socioeconomic conditions. The shrinkage estimator "borrows strength" across both time and space to improve precision, using data from all CPS samples since the last U.S. census and from all the states to derive each state's current eligibles estimate. For more information, contact Dr. Allen L. Schirm, Mathematica Policy Research, 600 Maryland Avenue, S.W., Suite 550, Washington, D.C. 20024-2512; tel.: 202-484-4684; Fax: 202-863-1763.

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Reports from the 1995 IASS Meetings in Beijing

Report from the President

Lars Lyberg

1. Introduction

During the past two years, the International Association of Survey Statisticians has continued developing the services it provides to its members. The upgrading of *The Survey Statistician* has proceeded slower than anticipated, but is making nice progress at present. All members have received the IASS booklets of ISI papers on survey research and a collection of Leslie Kish's "Questions and Answers." A series of short courses has been organized in conjunction with the ISI Session in Beijing and the Association continues to sponsor a vigorous scientific program at both the ISI Session and other conferences. This year we even conducted a survey of our own members.

2. Survey Statistician

The Survey Statistician (SS) has a new Editor, Mike Brick, Westat, Inc., Rockville, MD, USA. Denise Lievesley, past Editor, has stepped down as she is now President of our sister organization, IAOS. I would like to express my gratitude to Denise for her fine work and welcome Mike as the new Editor. The plans Denise put forth at the ISI Session in Cairo to upgrade *The Survey Statistician* are being executed and we look forward to a steadily developing *SS*. Gordon Brackstone, Graham Kalton and Pat Dean have made noteworthy contributions to the development of the *SS*, and I wish to express my gratitude to them too.

3. Short Courses at the People's University of Beijing

The Association organized a program of three short courses to be held at the People's University of Beijing from August 18-21, 1995 in conjunction with the ISI Session.

The courses held were:

Workshop on Survey Sampling in Developing Countries; Instructors: Graham Kalton and Colm O'Muircheartaigh.

Workshop on Establishment/Enterprise Surveys in Developing Countries; Instructors: Brenda Cox, Michael Colledge and K.P. Srinath.

Variance Estimation in Complex Surveys; Instructors: Wayne Fuller, Kirk Wolter, and Jay Breidt.

The Association is greatly indebted to its Scientific Secretary, Chris Skinner, for his unwavering efforts in establishing, publicizing, and organizing these courses, and to Yuan Wei and Yongjin Jin for local arrangements. The Association also wishes to acknowledge the generous contributions of time and expertise made by the course instructors.

4. Conferences

The Association participated in the International Conference in Survey Measurement and Process Quality, Bristol, April 1-4, 1995. This conference was jointly organized by IASS, the Royal Statistical Society, the American Statistical Association (ASA), the Market Research Society and the World Association for Public Opinion Research. The Conference was sponsored by many statistical organizations and firms. The ASA will publish the contributed papers and John Wiley, Inc. will publish the invited paper in an edited monograph.

5. Publications

The Association uses its column in the ISI Newsletter to inform members of upcoming events, activities, conferences, etc., that are of

interest to the survey research community. Kirk Wolter does an excellent job of providing IASS material for the ISI Newsletter.

The *Journal of Official Statistics* is currently offered at half the reduced rate to IASS members from developing countries. *Survey Methodology* has had a similar offer in place for a number of years.

Leslie Kish has edited a collection of his column "Questions and Answers" for publications in a booklet and distribution to members. Leslie wrote this column for many years and members can look forward to a collection that is both engaging and informative.

6. Committee Reports

Len Cook, Chair of the 1995 Program Committee, and his Committee members are to be congratulated for organizing an excellent set of meetings for the Beijing Session. Anders Christianson is now actively organizing the program for the Istanbul Session.

Howard Hogan, Chair of the Nominations Committee, and his Committee members deserve a hearty thanks for their efforts in developing an excellent slate of candidates for the election of IASS officers.

As a result of the concerns expressed about declining membership at the Florence Session, a membership survey was conducted under the supervision of Gösta Forsman. The main results were presented in the December 1994 issue of the *SS*. The IASS Committee on Declining Membership, chaired by Alain Charraud, found these results both enlightening and useful; further, the Committee has released a report which suggests various measures to increase IASS membership.

A Statutes Committee chaired by Fred Smith has prepared certain changes in the IASS statutes.

7. IASS Secretariat

The IASS is extremely grateful to INSEE for providing a home for the IASS Secretariat and

for its numerous other generous contributions to the Association. INSEE provides financial support for the IASS Secretariat, *The Survey Statistician*, publishes the booklets distributed to members, and also supports many other endeavors, both large and small. INSEE's generosity greatly enhances the services that the Association provides to members. Last year, the IASS Secretariat moved from Paris to Bordeaux.

Alain Charraud, Executive Director of the IASS, will step down from this office after the Beijing Session. Alain has served for two years and will be moving on to other commitments. His dedication and expertise will be sorely missed.

Benoit Riandey has graciously agreed to serve as the new Executive Director.

Anne-Marie Vespa-Leyder continues in her position as Executive Secretary. She, like Alain, works for the Ministry of Labor to whom we are also indebted. Anne-Marie plays many roles in a variety of important activities, for example, she manages *The Survey Statistician*, the Directory, and the booklets. She is never short of good ideas and always manages to keep other council members pointed in the right direction. I offer, for both the IASS and myself, our sincere thanks to her for her unfailing service and high level of competence.

8. Miscellanea

During my two years as President, we have made a conscious effort to profile the IASS and distribute IASS information and material to a wider public. IASS material was displayed at the 1994 ASA Joint Meetings in Toronto and at the 1995 Bristol Conference. A new logo has been designed and a new brochure is under way.

IASS continues to take an interest in sponsoring conferences; for instance, conferences under current consideration include San Antonio and Budapest.

9. Conclusions

I would also like to express great gratitude to the many members who have so generously

contributed their time and energies to serving the Association in a vast variety of ways – through committee work, by serving as country representative, by writing for *The Survey Statistician*, by organizing conference, etc. The success of the Association depends directly on the active participation of its members.

It has been an honor and privilege to serve as President of the IASS. It is my hope to be able to continue to participate in and serve the Association in the future.

Executive Director Report Alain Charraud

Since the creation of the IASS, the secretariat of the association has been provided by the French “Institut National de la Statistique et des Etudes Economiques” (INSEE), in Paris.

At the last ISI conference in Florence, August 1993, I was appointed Executive Director of our association (General Assembly, August 30, 1993), in place of B. Grais, who could no longer volunteer his services to the IASS in Paris as he was posted to Eurostat. On this occasion, Ms. Anne-Marie Vespa-Leyder was confirmed in her post as Executive Secretary.

1. Activity Report

Until August 1994, the secretariat administering our association was based at the INSEE headquarters in Paris. It was transferred to the INSEE Regional office in Bordeaux on September 1, 1994, at the request of INSEE to enable the association to make the best possible use of its resources. In a letter dated May 9, 1994 addressed to President Lars Lyberg, INSEE renewed the promise to continue to provide in Bordeaux, all resources previously made available to the association. The amount and the nature of these resources have been previously estimated and calculated by the executive members. On behalf of the association, I would like to take this opportunity to thank INSEE and in particular, its Director General, Mr. Champsor, its General Secretary, Mr. Consolo, its Director of International

Relations, Mr. Behmoiras for continuing to ensure this help.

As a result of this transfer, our Bordeaux office has:

- a part-time secretary, Mr. Oliver, who is in charge of the mail and updating membership lists as well as printing and disseminating documents;
- substantial resources for printing and dissemination; and
- sufficient computer resources (micro computer software).

After a few initial difficulties, the secretariat at Bordeaux and the Executive Director in Paris were able to function smoothly. So far, this duo has accomplished:

- printing of the official bulletin *The Survey Statistician*. Since the ISI session in Florence, several issues have been brought out, among them, the no. 30 issue containing the minutes of the AISE council meetings and those of the General Assembly as well as the reports submitted to the assembly;
- all members have been sent a newly printed, more complete membership list giving telephone, E-mail and Fax numbers of those members who communicated them to us;
- all Leslie Kish's Question-Answers in *The Survey Statistician* from 1978 onwards collected by Anne-Marie Vespa-Leyder and selected by the author have been edited, printed and sent to members; and
- Executive Committee and Council elections were also organized, membership and subscription renewals were processed.

For several years now, IASS members have been entitled to preferential subscription rates for two publications *Survey Methodology* (Statistics Canada) and the *Journal of Official Statistics* (Statistics Sweden).

As in the case of membership dues, these subscription rates are reduced by half for

developing countries with the IASS making up the difference. All members receive the official bulletin and the secretariat sends the ISI Newsletter to all our members who are not ISI members.

In the last two years, the executive members have also attended several meetings and committees.

- At the IASS executive meeting in Stockholm (27 July 1994), suggestions for the Declining Membership Committee were solicited. Several suggestions regarding events to be sponsored by the IASS were also accepted, in particular the conference in Bristol, April 1995, on "Survey Measurement and Process Quality" and the international conference to be held in Budapest in 1996 on "Sample Surveys in Transition Countries".

The Executive Director suggested support and active participation in the international conference in Paris on "Demography, Statistics and Privacy about Ethics, Confidentiality in Surveys and Registers". This conference will be organized by INED with the support of Eurostat and IASS.

The Declining Membership Committee met in Southampton November 21 with L. Lyberg, G. Forsman, F. Smith, C. Skinner, A. Charraud, and A.M. Vespa-Leyder in attendance. This meeting was an opportunity to analyze the initial results of the IASS membership survey on members' expectations. The data served as basis for actions like improving the newsletter, becoming more active participants in conferences and seminars, having a more specific target for membership, attracting more institutional members, and organizing IASS events in Eastern European and South American countries. Publications of a brochure and choosing a new logo to be designed by a specialist was also discussed.

2. Membership Report

On May 30, 1995, there were 1,083 members, of which 296 were also ISI members. The latter are exempted from the membership dues, unless

they belong to more than one section or choose to pay the IASS dues as well.

There are also 16 institutional members, the majority being national statistical agencies. Their membership contribution to the IASS amounted to FF 2000 (FF 800 being the developing countries institutional members dues). The geographical breakdown is given below.

On the whole, the fall in the membership number appears to have ceased. Consequently, the receipts from the membership dues stabilized in 1993 and 1994 (see section III).

Western Europe and North America have remained stable. Africa, Eastern Europe, Latin America and Asia progressed slightly, North Africa and the Middle East showed a greater increase (but it appears, it was largely thanks to only one country, Turkey).

The breakdown in zones retained the same features: very strong predominance of western Europe; third world countries were under represented, even though the decline in the membership figures has been checked. The previous report expressed this concern. It is reassuring to note that efforts are beginning to bear fruit. However, the policy of attracting new members should be pursued, particularly, in North African, Eastern European, Latin American and Asian countries which have a huge number of potential members. In the case of Sub-Saharan Africa, the question of membership dues represent an almost insurmountable obstacle, so it seems more advisable to devise a policy of cooperation and assistance.

3. Financial Report

The 1993 and 1994 accounts are given in Tables 1 and 2. In the case of receipts, the major element is their stabilization after the decline observed in the previous year. The yields from securities went through a special evolution following a favorable financial climate. They were very high in 1993, as a result of the fall in interest rates, they were much lower in 1994.

This gap was filled in partially by the royalties from our participation in an ASA conference.

As for expenditure, our participation in the Florence conference session, 1993, accounted for most of it. The expenses were higher than those incurred in Cairo. On the one hand, the expenses of three persons were covered. On the other hand, services in a western country (hotel, other expenses) are higher than those in a developing country.

Other major expenses in 1993 were for our usual subscriptions to Survey Methodology and the ISI newsletter as well as the sponsoring of the international conference on Establishment Surveys.

In 1994, apart from the expenses mentioned above, the action taken by the executive committee to re-activate the association as well as the sponsorship of the Bristol conference accounted for the majority of the costs.

On the whole, the IASS is in good financial position (a little over FF 700,000 in assets, of which FF 617,000 were held in securities). However, the costs incurred by the activity of the editing committee did not allow us to invest in new stocks or bonds. Instead, we preferred an investment in material and intellectual means intended to better assess and fulfill the needs of our members. Thus, we hope to maintain our membership figures and gain more members by making ourselves better known and by widening our audience.

Report from the IASS Scientific Secretary Chris Skinner

The IASS has developed a successful history of organizing workshops and short courses as satellite events to the biennial ISI sessions. My principal activity as Scientific Secretary has been the organization of three courses on survey methodology prior to the 1995 ISI session at Beijing. This program will take place at the People's University of China in Beijing.

The subject matter of the courses was chosen to give priority to the needs of IASS members in developing countries. Two of the courses, on survey sampling and on variance estimation have been run successfully by IASS at earlier sessions. The other course, on establishment enterprise surveys, was chosen to meet the demand of the IASS members in developing countries who had been unable to attend the International Conference on Establishment Surveys in Buffalo, USA in 1993.

Participation of members from developing countries is very dependent on financial assistance and so I sought funding from a number of national and international agencies to support the courses. At the time of writing, I have had two positive responses. First, the UN Statistical Office has agreed to fund a number of participants both from within China and from outside. I am very grateful to Graham Kalton for making initial contact with the UN. Second, the China Office of the Ford Foundation has agreed to fund six Chinese participants.

The IASS is also indebted to Professors Yuan Wei and Yongjin Jin of the People's University of China for the local organization of the short course program and the short course instructors for contributing their expertise for no fee.

As a second activity, I have been involved in preparations for a regional IASS-sponsored conference in Budapest in September 1996. The increased use of surveys in transition countries in recent years has raised many practical problems and this conference should provide a valuable opportunity for the exchange of experiences among survey statisticians from these countries and elsewhere. I have assisted the chair of the organizing committee, Professor Laszlo Vita, in the preparation of publicity and in the search for funding support.

Finally, I have contributed to discussions of various other IASS matters, which I shall leave to the President's report.

Table 1. 1993 IASS Accounts (in French Francs)

| Expenses | |
|---|-------------------|
| | FF |
| Printing of the "Statisticien d'Enquêtes" n°29 | 4 799,01 |
| Secretariat current expenditures..... | 3 109,81 |
| Presidential expenditures..... | 507,00 |
| ISI conference in Florence: travel, meetings expenditures (B. Grais, A. Charraud, A.M. Vespa-Leyder) | 55 473,28 |
| Subscription to VISA card | 200,00 |
| Purchase of traveler's checks | 2 030,00 |
| Sponsoring conferences (International conference on Establishment Surveys) .. | 8 756,99 |
| Subscriptions to Survey Methodology (including the subsidies for members from developing countries: FF 3375) | 15 125,42 |
| Purchase of securities (SICAV) | 81 168,40 |
| ISI Newsletter | 16 388,67 |
| TOTAL | 187 558,58 |
| 1993 IASS Receipts | |
| Membership fees (including subscription to Survey Methodology) | 101 601,18 |
| Interest on securities | 56 465,60 |
| TOTAL | 158 067,78 |
| BALANCE (difference between receipts and expenses) | -29 490,80 |
| Assets/ACTIF | |
| Securities..... | 606 700,00 |
| Bank account..... | 36 121,97 |
| Postal account | 51 940,48 |
| Traveler's checks..... | 1 400,00 |
| TOTAL | 696 162,45 |

Table 2. 1994 IASS Accounts (in French Francs)

| Expenses | |
|---|-------------------|
| | FF |
| Secretariat current expenditures | 6417 |
| Presidential expenditures..... | 4 228,84 |
| Executive Committee meeting - Stockholm | 12 017,24 |
| Membership Committee - Southampton .. | 13 188,47 |
| Meeting with the IASS Secretariate - Bordeaux..... | 2402 |
| Subscription to VISA card | 200 |
| Subscriptions to "Survey Methodology" (including subsidies to members from developing countries: 2970) | 14 477,40 |
| Subscriptions to "Journal of Official Statistics" (including the subsidies for members from developing countries: 2210) | 5990 |
| Purchase of the ISI Newsletter for IASS members | 18 738,35 |
| IASS Membership Survey | 22200 |
| Sponsoring of the Bristol conference..... | 8 133,67 |
| TOTAL | 107 992,97 |
| 1994 IASS Receipts | |
| Membership fees (including subscriptions to Survey Methodology and JOS).. | 94 451,59 |
| Interest on securities | 10347 |
| Royalties (ASA and J. Wiley & Sons)..... | 8 726,95 |
| TOTAL | 113 525,54 |
| BALANCE (difference between receipts and expenses) | +5 532,57 |
| Assets/ACTIF | |
| Securities | 6 17047 |
| Bank account..... | 25 031,30 |
| Postal account..... | 59 500,48 |
| TOTAL | 701 578,78 |

**Report of the Chairman of the Nominations
Committee
Howard Hogan**

Telefax and Internet have made the task of the nominating chairman much easier than before. This technology made it possible to assemble a nominations committee knowledgeable of the scattered IASS membership. The committee included H. Öztas Ayhan (Turkey), Pam Campanelli (United Kingdom), Enrique de Alba (Mexico), John Kovar (Canada), Oliver Sautory (France), Adam Marton (Hungary), and myself.

We worked mainly through the country representatives to solicit suggestions for each of these positions. We received 9 suggestions for president-elect, 12 for vice president, 14 for scientific secretary, and 45 for council member. We then selected the candidates keeping in mind our instructions to attempt to represent the diversity of the association's membership.

I believe that we largely succeeded. First, the nominees are individually very strong. Secondly, they represent diverse backgrounds and interest. Eleven countries, on all continents except Africa, were represented. Of the 17 nominees, five were women.

We would have liked to have done better in a number of areas. We should have done more advertising for candidates. We found it was difficult to maintain a balance between statisticians from developed and developing economics and among continents while still insuring a proper representation of women statisticians. We found it difficult to include statisticians from Africa, mainly because communications to many countries there are still difficult. We regretted that the IASS directory does not include telephone numbers, telefax numbers, or E-mail addresses.

We hope that the membership was pleased with the choices that we gave them. I certainly enjoyed the process and the opportunity to work with so many helpful people from around the world. I would like to thank the members and the committee for their work, the candidates for their participation, and those passed over for whatever reason, for their understanding.

**Report of the Program Committee
L.W. Cook**

The IASS program committee members for the 50th Session of the ISI were Len Cook (chair) (New Zealand), Nanjamma Chinnappa (past chair) (Canada), Huang Langhui (China), Heung Keun Oh (Korea) and Jelke Bethlehem (Netherlands).

The committee developed the program which was originally agreed to at the 49th Session of the ISI in Florence, after receiving proposals from members canvassed during 1992 in the ISI newsletter. The committee also had the benefit of the results of the survey carried out by the previous committee chair (N. Chinnappa) and the resultant analysis, as well as a review of the content of previous sessions, and discussions at the General Meetings of the association.

For the 1995 sessions, the program committee agreed to move beyond the usual meeting processes, and in a session titled "Practical Situations in Survey Design That Are Not Well Supported by Known Statistical Theory", a panel of international experts has gathered.

Overall, the topics selected for the 50th Session contained a balance of theoretical and applied statistics with a host of regional interest. I recognize that as chairman there may have been a bias towards topics on official statistics in the program. The final series of invited paper topics is listed in Exhibit 1. Exhibit 2 lists the contributed papers.

The committee welcomed the willingness of Professors Tim Holt and Leslie Kish, Dr. Kirk Wolter, Mr. Huang Langhui, Mr. John Cornish and Dr. Heung Keun Oh to be organizers of the invited paper sessions. Liaison with other program committees (IAOS, IASE, IASC, Bernoulli) was handled cooperatively.

The committee was somewhat frustrated by changes at the later stages of forming the program, but recognized the difficulties behind the factors which contributed to this. In particular, the committee experiences what I now understand to be the usual variety of difficulties in corresponding internationally with a wide range of countries.

Exhibit 1. ISI Beijing 1995 - IASS Invited Paper Sessions: as of 10 July 1995

| Topic | Organizer contact | Status of papers | Meeting no |
|--|--|---|-------------------|
| Auxiliary Information and Sampling Methods | M. Jean-Claude Deville France | Invited authors: Mr. Bengt Swensson, Sweden: <i>The Use of Auxiliary Information in Sample Surveys: Past, Present and Prospects for the Future</i> Dr. Roger Wright, USA: <i>Improving a Sampling Plan Using Auxiliary Information</i> Prof. Yves Tille, Belgium: <i>Auxiliary Information and Conditional Inference</i> Invited discussants: Prof. TMR Smith, UK Prof. Gad Nathan, Israel | IP 8 |
| PANEL: Practical Situations in Survey Design that are not Well Supported by Known Statistical Theory | Prof. Tim D. Holt UK | Panel members: Mr. Dennis Trewin, Aul/New Zealand Dr. J. Rao, Canada Dr. Graham Kalton, USA/UK Dr. Wayne Fuller, USA or Mr. Danny Pfefferman, Israel | IP 21 |
| Household Survey Methods for Dealing with Significant Differences Among Surveyed Sub-populations | Prof. Leslie Kish USA | Invited authors: Vija Verma, India, and Thanh Lê Seppo Laaksonen Farhad Merhan, Iran Sol Dutka and Lester Frankel, USA | IP 22 |
| Market Research Surveys: Experiences and New Approaches | Mr. Huang Langhui China Dr. Kirk Wolter USA | Invited authors: Ernesto Santos, Colombia: <i>Marketing Research Surveys in Developing Countries in Latin America and the Middle East</i> Mr. Lu Chunheng & Mr. Pan Jiancheng, China: <i>The Marketing Research Surveys in China</i> M. Michel Lejeune, France: <i>The Use and Abuse of Data Fusion in Market Surveys</i> Invited discussants: Albert Madansky, USA Martin Collins, UK | IP 23 |
| Changes in Users Expectations About the Quality of Survey Statistics in the Public and Private Sectors | John Cornish Australia | Invited authors: Dr. Michael Wolfson, Canada: <i>Better Data for Microsimulation</i> Ms. Jenny Church, England: <i>Changing Requirements for Family Income and Expenditure: The UK Experience</i> Mr. Ken Tallis, Australia: <i>Survey Design and Signal Extract to Meet Different Uses of Survey Data</i> Invited discussants: Mr. Lars Thygesen, Denmark Mr. Len Cook, New Zealand | IP 24 |
| Methodological Problems of the 2,000 World Census of Agriculture and Surveys | Dr. Heung Keun Oh Korea | Invited authors: Yhu Xiangdong, China: <i>The 1997 Chinese Census of Agriculture - An Overview</i> Prof. Burton Onate, Philippines: <i>Non-sampling Errors in Agricultural Censuses and Surveys: A Major Concern in the Third World</i> Prof. Prem Narain, India: <i>Census and Survey Issues in Indian Agricultural Census</i> Invited discussants: Prof. Luigi Biggeri, Italy Bong Ho Choi, Korea Prof. Midzuno, Japan | IP 25 |

Exhibit 2. ISI Beijing 1995 - IASS Special Contributed Topics as of 12 May 1995

| ISI Cttee Prelim | Title | Organizer | Status of session |
|------------------|---|---|---|
| CP 7C | Surveying Special Populations | <p>Beverly Carlson (H11F) Senior Adviser Program Division/Room 1108 UNICEF House 3 UN Plaza New York, NY 10017 United States of America Ph (1) 212-326-7390 Fax (1) 212-888-4765 Home ph (1) 212-517-3745</p> | <p>Contributed papers: T.J. Rao, India: <i>Allocation of Sample Size in Stratified Populations</i> Song, Ching-Tseng, China: <i>The Trend Elder Policy Projected by Survey Results</i> Bikas K. Sinha, India: <i>On Estimating the Size of a Mobile Population Rivet Jean-Paul, France: Enquetes Statistique Logeres en Milieu Museologique</i> Jason Oudora Onsembe, Ethiopia: <i>Methodological Innovations for Enumerating Special Populations: A Case Study, for Kenya and Ethiopia</i> Peter Lynn, UK: <i>Surveying School-leavers in Great Britain</i> Chadjipadelis Theodore, Greece: <i>Dimensions of Poverty and Social Exclusion Target Group</i> Wendy Akua Addae, USA: <i>Some Interesting Aspects of Sampling and Survey Methodology in a Multi-Language Setting: The Ghana Literacy Survey</i> Choi Jong Hoo, Korea: <i>A New Sampling Scheme in Anthropometric Survey: Using National Anthropometric Survey in Korea 1992</i></p> |
| CP 28 | Stochastic Models and Trend Measurement from Continuous Surveys | <p>David Findley United States Department of Commerce Bureau of the Census Washington, DC 20233 United States of America Ph (1) 301-763-5984 Fax (1) 301-763-2633</p> | <p>Title of paper: <i>A Comparative Study of a New Class of End Filters Within X-12-ARIMA</i> Authors: David Findley, USA Alistair Gray, New Zealand Brian Monsell, US Peter Thomson, New Zealand</p> |
| CP 29 | Time Use Surveys | <p>Lidia Barreiros Statistical Office of the European Communities Director of Social and Regional Statistics and Structural Plans L-2920 Luxembourg Ph (352) 4301-34667 Fax (352) 4301-34415</p> | <p>Contributed papers: Prof. Jonathan Gershuny, England: <i>Changing Time Use Pattern</i> Prof. Duncan Ironmonger, Australia: <i>Estimating the Value of Unpaid Work</i> Mr. Klas Rydenstam, Sweden: <i>Aspects of Swedish Women's and Men's Paid and Unpaid Work</i> Prof. Andrew S. Harvey, Canada: <i>The Role of Time Use in Quantifying Paid and Unpaid Work</i></p> |
| CP 31 | Multi-national Survey Designs | <p>Professor Leslie Kish Institute for Social Research University of Michigan Ann Arbor, Michigan 48106 Ph (1) 313-764-4424 Fax (1) 313-764-8263</p> | <p>Participants: Vijay Verma and Thanh Lê, Macro Int'l. Washington: <i>Sampling Errors for the DHS Surveys</i> Farhad Mehran, <i>Industry Statistics</i> Seppo Laaksonen, <i>Labor Force Surveys</i> Ranjan Som, UN Statistical Div. (Multi-country) Survey Programs: Operational Issues</p> |
| CP 32 | Establishment Surveys in Developing Countries | <p>K.P. Srinath Abt Associates, Inc. 4800 Montgomery Lane Suite 600 Bethesda, MD 20814 Ph (1) 301-941-0272 Fax (1) 301-652-3618</p> | |

Exhibit 2. ISI Beijing 1995 - IASS Special Contributed Topics as of 12 May 1995 (continued)

| | | | |
|-------|---|---|---|
| CP 33 | Good Uses of Simple and Robust Survey Processes in Complex Situations | Susan Linacre Australian Bureau of Statistics Statistical Services Branch P.O. Box 10 Belconnen, ACT 2616 Australia Ph (61) 6-251 7911 Fax (61) 6-251 6009 | |
| CP 49 | Innovative Uses of Administrative Data Sources IASS/IAOS | Lars Thygesen Danmarks Statistik Sejrogaade 11 DK-2100 Kobenhavn 0 Denmark Ph (45) 3917 3917 Fax (45) 3118 4801 | <p>Speakers: Pekka Myrskylä, Finland: <i>New World of Statistical Possibilities by Combining Administrative Data With Census Type of Data Files</i> Bergstrom, Gaesemy and Utne, Norway: <i>Measuring Employment Using Income Verifications from Tax Records</i> Lars-Gunnar Horte and Martin Ribe, Sweden: <i>Computation of 'Life Expectancy' in Employment</i></p> |

The committee appreciated working with the IASS program chair, Jean-Louis Bodin, and Wu Hui of the host country.

**Report on the IASS Representatives
Anne-Marie Vespa-Leyder**

The meeting was chaired by Dennis Trewin, IASS President and attended by Gordon Brackstone, Chair of the Network of Local Reps and in charge of the "Country Reports" column in *The Survey Statistician*, David Fitch (Panama and Central American Countries), Anjeles Iztueta (Spain), Malka Kantorowitz (Israel), Susan Linacre (Australia), Benoit Riandey (Executive Director), and A.M. Vespa (Executive Secretary).

1. The Country Reports in *The Survey Statistician*

Malka Kantorowitz suggested choosing a specific topic for each issue of the newsletter to propose to the Local Reps, instead of publishing any subject as we do now.

A.M. Vespa will send the President the list of Local Reps that is to be updated in the near future. A package should also be sent to all Representatives, containing documents about the Association. Lars Lyberg is preparing a new brochure about the IASS.

2. The Duty of Local Representatives

The duties of the Reps are:

- sending country reports;
- advertising about the Association;
- recruiting members;
- collecting the dues if necessary; and
- informing the secretariat about the changes of addresses or of situations of the members.

**Report on the IASS Council Meeting
Anne-Marie Vespa-Leyder**

The meeting was chaired by Dennis Trewin, IASS President and attended by Lars Lyberg (Sweden), Malka Kantorowitz (Israel), Chris Skinner (UK), Vijay Verma (India), Susan Linacre (Australia), Kirk Wolter (USA), Jan Kordos (Poland), Adam Marton (Hungary), Benoit Riandey (France), and A.M. Vespa-Leyder (France).

1. Revision of Statutes

It was agreed that we should not attempt to revise any statutes other than those previously agreed to by the General Assembly.

2. Finances

The Council Members would like some information about the interests on securities. Alain Charraud and A.M. Vespa will write to President to inform him about the basket of securities bought by the IASS at the "Banque Nationale de Paris".

There was some discussion about relative merits of an investment with good long term returns but some volatility in the short term, compared with an investment with a fixed (but lower) rate of return. A mixed strategy was suggested. The investment strategy will be reviewed when the dates of current investments expire.

A budget must be established for the next two years that takes into account the need for funds to sponsor statistical conferences. This budget should make a distinction between the number of ISI and non-ISI IASS members, as well as between developed and developing countries.

The IASS Secretariat will express the dues in five different currencies, explain that fees can be paid in convertible currencies, and evaluate the dues amount in each currency every other year. It will also mention that members are allowed to pay dues two or three years in advance.

3. Conferences

The *Paris Conference* on "Demography, Statistics and Privacy", to be held in October 1995, is sponsored by IASS. The accommodation expenses and travel for two members from transition countries will be covered by IASS.

The *Budapest Conference* on "Sampling Issues for Transition Countries," planned for September 1996, is also being sponsored by IASS. Other sponsors are needed to cover at least the travel and expenses of speakers from transition countries.

The *Israel Satellite Conference* is being planned for 1997, prior to the ISI Istanbul meeting. It is being organized by Malka Kantorowitz and Denise Lievesley. It should last two days. Additional sponsors are being sought by the organizers.

The *Quebec Conference* is planned for May 1996. It is being organized by the French Association for the Use of Statistics and Statistics Quebec. This conference will be the most important French speaking conference on statistics held in North America. It will be supported by IASS by promoting the conference amongst its members.

The *CASIC* conference is planned for December 1996 in the USA. It is organized by the American Statistical Association. The IASS will be one of the sponsors and will make a contribution which we expect will be based on previous experience. These have typically been returned with a profit.

A *Joint Conference* with IAOS is planned to be held in Mexico in 1998. The theme will be Human Development.

A *Paris Conference* on nonresponse is planned to be held in 1998. The proceedings will be part of the Wiley series of publications.

Jan Kordos suggested holding a conference in Poland in 1998 on business surveys and household budget surveys.

4. IASS Program Committee - Istanbul 1997

Malka Kantorowitz proposed that the suggested program be sent to all council members. This would allow members to write to Anders Christianson, Chair of the 1997 Program Committee to make comments or suggestions about the organization, including possible speakers.

5. IASS Program Committee - Helsinki 1999

Susan Linacre is Chair of the 1999 Program Committee to be held in Helsinki. Interested members are requested to volunteer to join this committee. During the council meeting, Vijay Verma agreed to be part of this Program Committee.

6. Publications

The Survey Statistician

The council members are requested to serve the Association in various ways. For instance, Vijay Verma is in charge, with Leslie Kish, of the Questions/Answers column, and Gordon Brackstone is editor of the Country Reports column.

Malka Kantorowitz suggested publishing a short column in *The Survey Statistician* about statistical software useful to survey statisticians, mentioning their functions and qualities.

Booklet of Invited Papers

The President, Dennis Trewin, volunteered to be in charge of the proceedings of invited papers of the Beijing Session.

During the next two years, council members may be asked to help the Association by being in charge of an IASS publication.

Report on IASS General Assembly Anne-Marie Vespa-Leyder

The meeting was chaired by Lars Lyberg, IASS President and attended by Dennis Trewin, incoming President; Benoit Riandey, incoming Executive Director; Jean-Claude Deville, incoming Deputy Executive Director; Anne-Marie Vespa-Leyder, Executive Secretary; and the members.

1. Presentation of the Reports

Several different reports were presented: President's report (Lars Lyberg), Executive Director's report (Alain Charraud) presented by Benoit Riandey, Scientific secretary's report (Chris Skinner), Program Committee for Beijing report (Len Cook). Howard Hogan, Chair of the Nominations Committee, did not attend the ISI meeting; his report was disseminated.

2. Amendments to the Statutes

The proposed amendments were presented for a vote in General Assembly. One amendment was approved and is shown below. The other proposed amendments will be examined again in the ad hoc Committee chaired by Fred Smith, and then submitted to the next General Assembly in Istanbul (1999).

1.2 The seat of the Association is in **France** (instead of "Paris"). The Association is established under and subject to French law.

3. Accounts

The accounts of the Association have been examined and found true and sincere by Lars Lyberg and Dennis Trewin. They were approved by the general assembly. A question was asked about the poor return on securities in 1994, and it was agreed that the Secretariat should provide further information.

4. Dues

An increase of the dues has been proposed to the members: from F.F. 130 to F.F. 150. The increase was denied until information was available on the need for additional revenue.

5. Sponsoring Conferences

Benoit Riandey presented information the conference he is organizing in Paris, on behalf of INED (the French National Demographical Institute) on "Demography, Statistics and Privacy". IASS and Eurostat are sponsoring that event which will take place on October 23-24, 1995.

10. **The New President, Dennis Trewin (Australia)**, was welcomed by the outgoing one, Lars Lyberg (Sweden). He said a few words about the actions he intends to undertake during his term. He also thanked Lars Lyberg for his considerable effort.

